INITIAL ENVIRONMENTAL EXAMINATION

PROJECT/ACTIVITY DATA

Project/Activity Name:	DO 3: Broad-based, Inclusive Economic Growth Improved IEE
Geographic Location(s) (Country/Region):	Ethiopia / East Africa
Amendment (Y/N):	No
Implementation Start/End Date:	July 24, 2019 – July 23, 2022
Solicitation/Contract/Award Number:	Multiple
Implementing Partner(s):	Multiple
Bureau Tracking ID	DO3 Inclusive Economic Growth IEE https://ecd.usaid.gov/document.php?doc_id=52519
Tracking ID/link of Related RCE/IEE (if any):	See Annex 3 for list of related RCE/IEEs
Tracking ID/link of Other, Related Analyses:	See Annex 3 EMMPs will be uploaded at the request of the BEO to: https://drive.google.com/drive/u/0/folders/11havIAxH08vgaiUtmpGXpv2I-xnRWSNK PERSUAP: FtF Value Chain Activity PERSUAP https://ecd.usaid.gov/repository/pdf/50680.pdf

ORGANIZATIONAL/ADMINISTRATIVE DATA

Implementing Operating Unit(s): (e.g. Mission or Bureau or Office)	USAID/Ethiopia		
Other Affected Operating Unit(s):	USAID/Ethiopia, BFS		
Lead BEO Bureau:	AFR		
Funding Account(s) (if available)**:**	Multiple		
Original Funding Amount:	$277 million		
If Amended, specify funding amount:		**Amendment Funding Amount:**	
If Amended, specify new funding total:	NA		
Prepared by:	Yitayew Abebe, MEO and CIL, USAID/Ethiopia; Carmen Saab, Jesse Gibson and Josh Habib, ECOS/Cadmus Group		
Date Prepared:	October 2019		

ENVIRONMENTAL COMPLIANCE REVIEW DATA

Analysis Type:	☒Environmental Examination	☐Deferral

Environmental Determination(s):	☐ Categorical Exclusion ☒ Negative ☐ Positive ☐ Deferred (per 22 CFR 216.3(a)(7)(iv)
Initial Environnemental Examination Expiration Date:	January 2022 (see BEO specific condition #2 for extension instructions)
Additional Analyses/Reporting Required:	Environmental Review Reports (ERRs Annex 7), EMMPs
Climate Risks Identified (#):	Low ____45__ Moderate ___18__ High _8___
Climate Risks Addressed (#):	Low _N/A_ Moderate __18___ High _8____

THRESHOLD DECISION MEMO AND SUMMARY OF FINDINGS

PURPOSE OF THIS INITIAL ENVIRONMENTAL EXAMINATION

The purpose of this document, in accordance with Title 22, Code of Federal Regulations, Part 216 (22 CFR 216), is to provide a preliminary review of the reasonably foreseeable effects on the environment of the USAID interventions described herein and recommend determinations and, as appropriate, conditions, for these activities. Upon approval, these determinations become affirmed, per 22 CFR 216 and specified conditions become mandatory obligations of implementation. This IEE also documents the results of the DO-level Climate Risk Management process in accordance with USAID policy (specifically, ADS 201mal).

The primary objectives of this IEE and CRM include:

1. Document the required environmental analysis and threshold determination for new DO 3 projects/activities.
2. Document the CRM for the entirety of the DO3 portfolio including new and ongoing activities.

New activities under Development Objective 3 analyzed in this IEE are identified in Table 1.

PROJECT/ACTIVITY SUMMARY

The new USAID/Ethiopia Country Development Cooperation Strategy (CDCS) for 2019-2022 has the following goal: Ethiopia will be more prosperous, inclusive and self-resilient with increasingly empowered citizens driving effective and accountable role in governance, poverty reduction and improve crisis management**.** In contrast to the previous strategy, the new CDCS proposes an integrated approach that will adeptly bring together a range of interventions under the following four integrated development objectives (DOs) and one special objective (SpO):

- DO1: Disaster Risk Management Strengthened;
- DO2: Resilience of vulnerable Population to key shocks increased
- **DO3: Broad Based Inclusive Economic Growth Improved**
- DO4: Gender Equitable Health and Education Outcomes advanced, and
- SpO: Citizens Responsive Governance Enhanced.

THRESHOLD DETERMINATION

The 22 CFR 216 requirements are documented in this IEE for new DO3 activities (as of January 2020) as noted in Table 1. These activities are assigned a Negative Determination as noted in this IEE Sections 4 and 5. Upon approval, this determination becomes affirmed, and the specified associated conditions become mandatory obligations of implementation.

TABLE 1: DO3 NEW ACTIVITY LIST

Project 1: Broad Based Inclusive Economic Growth Improved Development Objective
Sub-Activity 1.1: Policy Dialogue, Development and Implementation (PDDI)
Sub-Activity 1.2: GTN Mid-term Evaluation
Sub-Activity 1.3: Impact Evaluation of FTF Programs in Ethiopia
Sub-Activity 1.4: Mid-term Evaluation of Feed the Future Ethiopia Value Chain
Sub-Activity 1.5: Horticulture Value Chain Activity
Sub-Activity 1.6: Youth Employment and Urbanization
Sub-Activity 1.7: Financial Inclusion Activity
Sub-Activity 1.8: Women's Economic Empowerment
Sub-Activity 1.9: Fortification

CLIMATE RISK MANAGEMENT

The climate risk assessment for this IEE (see section 4.2 for further discussion and Annex 4 for the CRM screening table) is based on the USAID Climate Risk Screening and Management Tool for Project Design (U.S. Climate Resilience Toolkit: https://toolkit.climate.gov/. A summary of climate risks for each activity can be seen in the table below:

TABLE 2. CLIMATE RISKS

Activities	Climate Risk		
	LOW	MEDIUM	HIGH
PRIVATE SECTOR LED ECONOMIC TRANSFORMATION			
FtF Value Chain	√	√	
Policy Dialogue, Development, and Implementation (PDDI)	√		
Growth Through Nutrition (GTN)	√	√	
GTN midterm evaluation	√		
Impact Evaluation of FtF Programs in Ethiopia	√		
Midterm Evaluation of Feed the Future Ethiopia Value Chain Activity	√		
Horticulture Value Chain Activity	√	√	
Land Governance Activity	√	√	

Activities	Climate Risk		
	LOW	MEDIUM	HIGH
Partnership for Economic Growth	√		
Hawassa Workers and Community Wellness: Migrant Worker Support and Community-Led Support Services	√	√	
Engineering Services and Construction Oversight		√	√
Advancing Economic Diversification in Ethiopia	√		
Ethiopian Strategy Support Program (ESSP)	√		
Youth Employment and Urbanization	√		
Financial Inclusion Activity	√		
Women's Economic Empowerment	√		
Fortification of Commodities	√	√	
Feed the Future Ethiopia Advanced Seed Adoption Program	√	√	

BEO SPECIFIED CONDITIONS OF APPROVAL

1. **Reporting Conditions:** Due to the high level (Development Objective) of the analysis and breadth of the intervention categories addressed in this IEE, it is difficult to fully describe the actions that will occur in this program and their likely environmental impacts. For this reason, DO-level IEEs are generally discouraged. Rather than ask that this IEE be replaced by several lower-level ones, the AFR BEO requests, as a condition of approval, that the program manager provide access to the Regional Environmental Advisor (REA) and to the AFR BEO Team to review (not approve) the Environmental Mitigation and Monitoring Plans/Reports (EMMPs/EMMRs) that will be written to implement the findings of this IEE. These should be uploaded into a Google Drive folder(s) here: https://drive.google.com/drive/folders/1q7HGMzgopJ-MuKxkQEJ4GSPp9R7Qzv-5?usp=sharing, in the appropriate sub-folder. This will facilitate access by all parties who need these documents, including the Mission Environmental Officer and the AOR/COR. This will allow the REA and the BEO Team to spot-check and review these documents to confirm that the mitigations seem appropriate and are cognizant of the specific design of the activities.

   The negative determinations recommended in this IEE are contingent on full implementation of specified conditions and a set of general monitoring and implementation requirements specified in this "BEO Conditions" section as well as Section 5 of the IEE. Some specific conditions to highlight include:

- New activities and those revised to incorporate a change in scope or nature will require an IEE amendment to identify and address potential environmental impacts. This condition is mentioned again in Section 7 of this IEE.
- Mitigation measures need to be determined for the environmental impacts at the level of the EMMP/EMMR. These EMMPs/EMMRs will be shared with the REA and the BEO Team (and other mission stakeholders, as appropriate) in a Google Drive folder.

2. **Conditions for Extension:** This IEE is approved for approximately two years, rather than the more typical five-year length, also in response to the fact that the IEE was prepared at such a high level. The Mission may submit a recommendation for an IEE extension when the Mission demonstrates that partners are completing meaningful and detailed analysis of environmental impacts and are designing and implementing appropriate mitigation measures through their EMMPs. If consultations between the Mission, the REA and the BEO identify insufficiencies in this IEE, additional analysis and potentially additional mitigating conditions may be required through an amendment of this IEE or through a stand-alone Supplemental IEE.

IMPLEMENTATION

In accordance with 22 CFR 216 and Agency policy, the conditions and requirements of this document become mandatory upon approval. This includes the relevant limitations, conditions and requirements in this document as stated in Sections 3, 4, and 5 of the IEE and any BEO specified conditions of approval.

Will this project/activity involve construction[1] as defined by ADS 201 and 303? Yes X No ☐

Small scale construction - e.g., small scale irrigation may occur under this project. As such, the IEE includes an intervention category addressing construction.

[1] Construction, as defined by ADS 201 and 303, includes: construction, alteration, or repair (including dredging and excavation) of buildings, structures, or other real property and includes, without limitation, improvements, renovation, alteration and refurbishment. The term includes, without limitation, roads, power plants, buildings, bridges, water treatment facilities, and vertical structures. In the box below, describe any construction planned for this project/activity. Refer to ADS 201maw for required Construction Risk Management procedures.

USAID APPROVAL OF INITIAL ENVIRONMENTAL EXAMINATION

PROJECT/ACTIVITY NAME: Broad Based Inclusive Economic Growth Improved Development Objective

Bureau Tracking ID: https://ecd.usaid.gov/document.php?doc_id=52519

Approval:	SEAN JONES, Mission Director [*required*]	12/2/2019. Date
Clearance:	DIANNA DARSNEY/DE SALCEDO, Deputy Mission Director [required]	11/13/19 Date
Clearance:	~~TYLOR~~ HOLT, Acting DO3 Lead [*required*]	11/4/19 Date
Clearance:	Tyler BERT UBAMADU, Regional Legal Advisor (RLO)	Date 11/5/19
Clearance:	YITAYEW ABEBE, Mission Environmental Officer & Climate Integration Lead [required]	11/4/19 Date
Clearance:	Cleared (next page) DAVID KINYUA, Regional Environmental Advisor [required]	Date
Clearance:	cleared by email (attached) COLIN QUINN, AFR Climate Integration Lead [required]	Nov 15 2019 Date
Concurrence:	BRIAN HIRSCH, AFR Bureau Environmental Officer [*required*]	1/21/2020 Date
Concurrence:	[NAME], _____ Bureau Environmental Officer [*other BEOs required for cross Bureau funding or geographic responsibilities*]	Date

DISTRIBUTION:

OAA
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EG&T

USAID APPROVAL OF INITIAL ENVIRONMENTAL EXAMINATION

PROJECT/ACTIVITY NAME: Broad Based Inclusive Economic Growth Improved Development Objective

Bureau Tracking ID: _____

Approval:	SEAN JONES, Mission Director [*required*]	Date
Clearance:	DIANNA DARSNEY DE SALCEDO, Deputy Mission Director [required]	Date
Clearance:	TYLOR HOLT, Acting DO3 Lead [*required*]	Date
Clearance:	BERT UBAMADU, Regional Legal Advisor (RLO)	Date
Clearance:	YITAYEW ABEBE, Mission Environmental Officer & Climate Integration Lead [required]	Date
Clearance:	DAVID KINYUA, Regional Environmental Advisor [required]	Date
Clearance:	COLIN QUINN, AFR Climate Integration Lead [required]	Date
Concurrence:	BRIAN HIRSCH, AFR Bureau Environmental Officer [*required*]	Date

DISTRIBUTION:

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Re: IEE Concurrence

Inbox

Colin Quinn
to me

Thank Yitayew. I clear these DO screenings for CRM.

On Thursday, November 14, 2019, Yitayew Abebe <yabebe@usaid.gov> wrote:

Dear Colin, hope this email finds you well
Thank you very much for your quick review. Below my response to your comment/suggestion

- Your comments/suggestions are all valid and I inserted your proposed phrases in all IEEs (attached)
- DO Team involvement: The CDCS level climate risk annex was prepared at DO and IR levels facilitated by Alex Apostos. Alex Apostos had through discussion with all DO team/technical offices in identifyin
- David Kinyua has cleared all DO IEEs and he is of the opinion that you are the appropriate person to clear on the CRM (will forward you his email stating that)

Once again thank you very much for your quick response.

YITAYEW ABEBE
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"Nature Provides Free Lunch, but ONLY if we control our appetites" William Ruckelshaus

INITIAL ENVIRONMENTAL EXAMINATION

CONTENTS

1.0 PROJECT/ACTIVITY DESCRIPTION

1.1 PURPOSE OF THE IEE

The purpose of this document, in accordance with Title 22, Code of Federal Regulations, Part 216 (22 CFR 216), is to provide a preliminary review of the reasonably foreseeable effects on the environment of the USAID interventions described herein and recommend determinations and, as appropriate, conditions, for these activities. Upon approval, these determinations become affirmed, per 22 CFR 216 and specified conditions become mandatory obligations of implementation. This IEE also documents the results of the DO-level Climate Risk Management process in accordance with USAID policy (specifically, ADS 201mal).

The primary objectives of this IEE and CRM include:

1. Document the required environmental analysis and threshold determination for new DO3 projects/activities.
2. Document the CRM for the entirety of the DO3 portfolio including new and ongoing activities.

This IEE is a critical element of USAID's mandatory environmental review and compliance process meant to achieve environmentally sound design and implementation. Potential environmental impacts should be addressed through formal EMMPs and/or Environmental Assessments (EAs), if needed.

This environmental analysis addresses the entire portfolio of activities expected to be implemented by USAID/Ethiopia Broad Based Inclusive Economic Growth Improved Development Objective. Implementing partners are responsible for monitoring the environmental mitigation measures for their activities per the conditions of the IEE. The EMMP describes the impacts identified in the IEE and the mitigation measures planned to minimize or eliminate the environmental impacts of project activities (ADS 204 Supplement Section 5).

New activities under Development Objective 3 analyzed in this IEE are identified in Table 1 with activity descriptions in Table 2. For reference, Annex 3 provides a framework of coverage for ongoing activities within DO3 but covered by other IEEs. While this IEE only covers new activities, the Climate Risk Management (CRM) analysis in this IEE includes ongoing activities, which previously did not have a CRM. Activity descriptions for the ongoing activities are also provided in Annex 2.

1.2 PROJECT/ACTIVITY OVERVIEW

Ethiopia's economy has been growing at a relatively strong rate, resulting in increased incomes per capita and declining poverty. However, Ethiopia's GDP per capita still ranks among the lowest in the world and the poverty rate is still too high. The state led development approach that Ethiopia has relied on has reached its limit. It can no longer afford growth driven in by public sector investments using Chinese concessional loans. The Ethiopian government is, therefore, making the choice to transition from the Chinese model of state led development to the western model of private sector led growth. To succeed, Ethiopia needs rapid and large-scale

investment and growth in private enterprise. Otherwise the economy will not grow fast enough to generate employment for the estimated 2 million youth per year, increase household incomes and reduce poverty, and build a sustainable basis for public and private finance.

Development Objective 3 (DO3) supports private sector led economic transformation, which is essential if Ethiopia is going to become self-reliant. To help Ethiopia achieve this transformation, over the next five years, USAID/Ethiopia will partner with the Ethiopian Government to help it transition from a socialist state-driven model towards a private sector led model. **(IR-1)** USAID/Ethiopia will help the GoE identify and implement sound economic policies (***Commitment: Economic Policy***) that create a business enabling environment that promotes private sector investment and growth. **(IR-2)** As agriculture is a critical sector of the economy and the largest source of both foreign exchange and livelihoods in the country, the Mission will invest in technical assistance to businesses and promote policy reforms that promote private sector-led agricultural growth and the transformation of the sector itself. **(IR-3)** The Mission will also invest in targeted market system interventions designed to address specific business constraints to the growth of private enterprise such as the availability of land, finance, water, internet services, and increasingly skilled labor. **(IR-4)** Finally, recognizing that sustainable economic transformation cannot happen if half the population is disadvantaged, USAID/Ethiopia will promote women's economic empowerment (***Commitment: Economic Gender Gap***), including leadership, access to resources, civic engagement, safety, etc. One example of potential investment could be promoting effective associations of women business owners in urban and peri urban growth corridors in the Feed the Future zones of influence and Addis Ababa. USAID/Ethiopia could provide technical assistance to help those groups of women address business, policy, and cultural gender discrimination so they can make even greater contributions to Ethiopia's economic and social transformation.

Below is the list of the different Intermediate Results (IRs) under DO 3.

IR 3.1 Ethiopia's economic reform agenda supported

This IR sets the stage for Ethiopia's entire economic reform. USAID is the best suited among all donors to support the initiative, given its experiences in post-soviet countries. The GoE Federal and Regional leaders are committed to defining and implementing targeted policy reforms and investments to create the private sector led transformation of the economy, including agriculture. The policies are not yet in place; our strategy is to help them understand the economy and prioritize reforms, which USAID and the rest of the donor community, NGOs and universities will support. The GoE is already cooperating with universities, business associations and persons to inform policy choices.

IR 3.2 Agriculture transformation accelerated

This IR promotes the commercialization of the economy's largest employer and source of foreign exchange. The GoE is committed to its commercialization and must overcome tremendous challenges; the bulk of the sector is community and cooperative based-subsistence agriculture. The Ministry of Agriculture is beginning to make fundamental changes in its policies. It is also investing heavily in infrastructure and marketing systems that provide subsistence farmers and businesses with the means to meet domestic and international market demands.

IR 3.3 Inclusive markets systems improved

As documented by USAID's *Growth Constraints Analysis,*[2] Ethiopia's economy will not improve without strategic investments in basic factors of production that underly a diverse range of industries. This includes broader and more equitable availability and affordability of energy, water, land, ICT, and skilled labor. USAID will invest in targeted market system approaches to alleviate these constraints to better support the development of new industries and services, particularly private enterprises. This will include efforts to improve energy access with Power Africa, Ethiopian ministries, and investors. The Mission's work on land reform leverages work on land use and urban planning funded by DFID and GIZ. ICT support for entrepreneurs, agricultural traceability, and market information systems can be expanded to include the financial sector and digital infrastructure as the GOE supports liscensing and the extension of networks. USAID will work with industrial park workers to promote worker retention and greater productivity for businesses, including U.S. companies.

IR 3.4 Women's economic empowerment enhanced

Ethiopia's government is committed to promoting gender equity and equality. Much of the legislation to promote gender equity is 'on the books' but the cultural norms that discriminate against women are very strong. The government's strategy to diversify the economy and promote political reforms opens greater opportunities for women and youth. The changes will require collective action by and for Ethiopians, primarily young women and business owners, who already have some degree of financial independence and familial authority. USAID will make targeted investments in Feed the Future zone areas where economic diversification can accelerate the evolution of gender norms. Many of the NGOs, businesses and universities are ready for the changes. The collective action by women to change gender norms in businesses will accelerate economic growth as well as increases in household wealth, family nutrition and declines in vulnerability to shocks.

1.3 PROJECT/ACTIVITY DESCRIPTION

Table 2 present the list of sub-activities with descriptions under the DO3 activity: Private Sector Led Economic Transformation

Table 2. Activity Descriptions

Activity	Description
Project 1: Private Sector Led Economic Transformation	
Sub-activity 1.1 Policy Dialogue, Development and Implementation (PDDI)	Predictable, transparent, and inclusive policy systems designed to promote a better business enabling environment and encourage private sector investment will accelerate economic growth and transformation. The proposed activity will work closely with government and civil society institutions, other donors, research organizations, and other existing USAID supported activities to develop a base of evidence

[2] Ibid

	for policy reform and advocate for such reform. The focus will be on supporting policy change in the following areas: (i) Enabling Environment for Private Sector Investment, (ii) Agricultural Inputs, (iii) Resilience and Risk Management, and (iv) Trade. There will be an overarching focus on policy improvements related to the private sector business enabling environment since that is directly linked to most of the policy areas listed. The objective of the activity is to strengthen capacity of the Ethiopian basic education system to develop & implement inclusive policies through promotion of policy dialogues, development & implementation to be achieved through active engagement of all actors
Sub-activity 1.2 GTN mid-term evaluation	The purpose of this mid-term performance evaluation is to examine what the GtN Project has achieved at the mid-way point in implementation; how well it is being implemented; how it is perceived and valued; whether expected results are occurring or are likely to occur before the end of the project; and to assess the management and operation of the project. USAID/Ethiopia intends to use the assessment findings as evidence base for follow-on design.
Sub-activity 1.3 Impact Evaluation of FTF Programs in Ethiopia	In order to measure impact across Feed the Future (FTF) focus countries, each USAID Mission is required to conduct a Population Based Household Survey across the FTF Zone of Influence in that country. Missions are required to implement a Zone of influence baseline which will allow progress to be assessed at the midpoint and final stage of its FTF program implementation. IFPRI and CSA will collect data for the required population-based indicators in a sample of the 149 woredas which make up the USAID/Ethiopia FTF Zone of Influence. They will undertake the required mid-point and final zone of influence survey and analysis over the next five years. The project will establish statistically significant control groups and collect baseline that can be used to conduct impact evaluations for selected high value Mission FTF programs. The team will also use existing data from the Agriculture Growth Program baseline, Demographic Health Survey and other sources to generate interim baseline information for the Zone of Influence indicators.
Sub-activity 1.4	The purpose of this mid-term evaluation is to assess how the Feed the Future Ethiopia Value Chain Activity (VCA) is progressing from inception to present (Jan 2017 to the time of this evaluation). The findings and recommendations from this evaluation will be used to

Midterm Evaluation of Feed the Future Ethiopia Value Chain Activity	guide the remaining years of Activity implementation through Dec 2021. Moreover, the findings of this evaluation are expected to inform future similar programming. In particular, lessons learned from this Activity's implementation will help inform USAID's future approach to support the GOE's Agriculture Growth Program (AGP). The primary users of this evaluation are USAID, the implementing partner and the local Government entities working in the Agriculture sector.
Sub-activity 1.5 Horticulture Value Chain Activity	USAID will implement a new mechanism, currently under design, to improve private sector engagement in horticultural value chains and ultimately benefit smallholder farmers. This mechanism will coordinate with donors and other stakeholders involved with increasing horticulture productivity. The USAID activity will focus on other elements important to the value chain beyond production training that other donor projects fund. The activity is expected to help expand sales to domestic and international markets, both of which have strong and growing demand. The activity will use a market facilitation approach towards addressing the root causes currently inhibiting the sector. Moreover, the activity is expected to increase exports, helping to alleviate some of the major foreign exchange shortage issues facing Ethiopia. Special emphasis will be given towards promoting diet diversity through increasing the access, availability and utilization of nutritious, marketable horticultural crops. Working together with other donor-funded programs, the GOE and private sector, the activity is expected to bring expertise towards improving access to inputs (including policy work), post-harvest handling and market connectivity. This activity is not envisioned to conduct on-farm productivity interventions.
Sub-activity 1.6 Youth Employment and Urbanization	Ethiopia is among the ten fastest urbanizing countries in the world. While the population is still predominantly rural, its average annual urban growth rate is 5.2 percent. Cities gain more than one million new urban residents every year. By 2040, it is estimated that at least one third of the population will live in urban areas. Ethiopia's growing urban population will seek economic opportunities. Urban consumers will demand a greater variety and quantity of foods, thus creating potential benefits for farmers and employment opportunities in agriculture related processing, manufacturing, and services. At the same time, growing urban centers can provide a flow of investment capital, remittances, technologies, and know-how to the rural producing areas. However, without proper management urbanization can increase inequality, residential slums, and violent crime. According to UN-

	Habitat, 76.4 percent of the total urban population in Ethiopia resided in slums in 2010. The new urbanization activity plans to focus on five main urban centers (including Addis Ababa) all within the Feed the Future Zone of Influence, four of which already are or are expected to be locations for new industrial parks. Using the results from a planned central mechanism urban study, the new activity will use a *pro-poor market facilitation* approach to identify the economic sectors best able to reach urban poor and focus on addressing key constraints to improving market functionality to the benefit of the poor. The activity will engage with city leadership, urban planners, private companies, other donors and partners, to facilitate improved urban planning, urban-rural food systems, resource mobilization, and increase employment opportunities especially for youth. Increasing the business environment to allow for companies to hire and maintain more workers will help USAID address a key initiative of the Government of Ethiopia, especially the Jobs Creation Commission.
Sub-activity 1.7 Financial Inclusion Activity	This activity is focused on the mission's work on agricultural finance and investment. There are three parts. The first part, which was requested by BFS's Office of Markets and Partnership Innovation, is an attempt to understand how the mission's mechanisms relate to agricultural finance and investment. EG&T identified approximately 30 activities which could qualify. BFS has contracted Dalberg to conduct an inventory to better describe the activities and their interventions. Dalberg will interview mission CORs/AORs and implementing partners to identify the nature of the work. Once compiled, Dalberg will compile gaps, strengths, and opportunities which the mission, BFS and others in the USG might respond to. The second part of the work was requested by EG&T; technical assistance to help the Government of Ethiopia's Ministry of Agriculture and Livestock Resources and the Agricultural Transformation Agency set its new agricultural policy reform agenda. This effort is consistent with EG&T's role as a Co-Chair on the Rural Economic Development Private Sector Task Force. ATA is the co-chair and specifically requested this assistance. Dalberg will gather background information to form an evidence base about prior policy work and constraints, consult with development partners about their perceived priorities for future reforms, and then report to the PSFG its recommendations for reforms to boost private sector participation and performance in the agricultural sector. The third component is a return on investment

	analysis of Ethio-Chicken. The fourth is training on agricultural investment and finance.
Sub-activity 1.8 Women's Economic Empowerment	Women's economic empowerment considers to be a factor of both women's achievement and as well as of gender parity with men. The projects will focus on five key areas a) making women able to make decisions and control over resources without fear of repercussion, b) to make women benefit from economic activities, access to market and resources, c) encourage women to participate in community activities and speak in and for their communities, d) create access to resources and skills they need to become equal participants in society and e) reduce the hard work freeing up time for production, education, child care and leisure activities. It will also establish women's marketing collectives and community resources centers that are set around value chains.
Sub activity 1.9 Fortification	To address micronutrient deficiencies the project will Enriched commonly eaten staple foods with micronutrients aimed at compensating for what is not available in local diets. This micronutrient will be administered through the staple to reach the population targeted. Nutrients will be added to food at higher levels than what the original food provides. Fortification of small-scale mill processed staple foods is a simple, affordable and viable approach to reach large sections of Ethiopian population with iron, folic acid and other essential micronutrient. The project will provide training to small scale millers on raw material control, process control, finished product control, procedures where fortified foods are prepared, packed, stored or held for sale, successful application of technology based largely on compatibility of vehicle, ingredients and process. Quality Assurance system will be in place from raw materials and ingredients used to product handling through distribution channel all the way to final consumer.

2.0 BASELINE ENVIRONMENTAL INFORMATION

2.1 LOCATIONS AFFECTED AND ENVIRONMENTAL CONTEXT (ENVIRONMENT, PHYSICAL, CLIMATE, SOCIAL, THREATENED AND ENDANGERED SPECIES)

GEOGRAPHY & SOCIETY

Ethiopia is a large and diverse landlocked country, located in the Horn of Africa between 3º and 15ºN latitude and 33º and 48ºE longitude. Covering a land surface area, including inland water bodies, of 1,127,127 km², Ethiopia is divided into nine regions and two city administrations (Schlüter, 2006). (See Figure 5 for a political map of Ethiopia.) The Oromo, Amhara, Somali, and Tigreans make up more than three-quarters of the population, but there are more than 80 different ethnic groups within Ethiopia. Pastoralism supports close to 15 million (around 15 percent) of Ethiopia's total estimated population. This percentage of the population owns40 percent of the country's livestock(International Work Group for Indigenous Affairs, 2016). The political and economic situation of indigenous peoples in Ethiopia has become increasingly unstable as their communities are frequently marginalized, displaced, and deprived of traditional livelihoods and access to natural resources.

Figure 1. Map of Ethiopia

POPULATION TRENDS

Ethiopia is one of the most populous countries in the world with a total population of 99.4 million (2015) and a growth rate of 2.5 percent (The World Bank Group, 2016).(See Figure 6 for a population density map.) The country is rapidly urbanizing at a rate of 4.1 percent a year. The UN estimated Ethiopia's urban population would continue expanding from 13 percent in 1990 to 19.0 percent in 2014, reaching 38 percent in 2050 (United Nations, 2014). As an indication of rapid urban growth, the capital city, Addis Ababa, is expected to double its population of 3.4 million by 2030 (The World Bank Group, 2015).

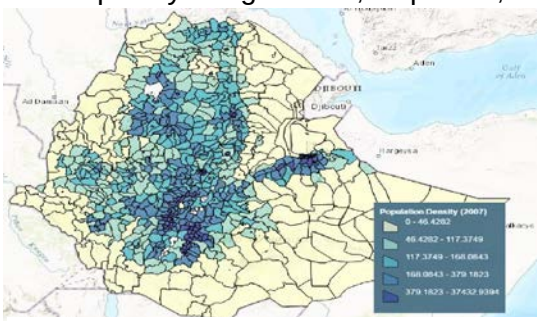

Figure 2. Population Density as of 2007 (Map Sourced from GAFSP, N.D.)

At the current annual growth rate, Ethiopia's population is estimated to surpass 135 million by 2030 and is projected to be among the world's top ten largest countries by population by 2050 (United Nations, 2015).

Ethiopia is a country characterized by enormous internal human displacements taking place primarily as a result of two driving forces: natural and manmade disasters, and development actions. Environmental-induced displacement in Ethiopia is typically attributed to natural disasters from erratic rainfall, flooding, and drought resulting in massive spontaneous organized and unorganized population movements. This has long been the case for Ethiopians dependent

on agriculture who have drifted from moisture-stressed and overpopulated northern and southeastern parts of the country to more fertile, wetter and sparsely populated lowland areas.

ECONOMY

Ethiopia remains one of the world's poorest countries with a per capita income of US$590 (Atlas gross national income, 2014), which is substantially lower than the regional average of US$1,630 (The World Bank Group, 2016). Ethiopia is also ranked 174 out of 187 countries on the Human Development Index (2014) of the United Nations Development Program. At the same time, the economy has experienced strong and broad-based growth over the past decade and made substantial progress on social and human development objectives. According to the International Monetary Fund (IMF), Ethiopia is now one of the top five fastest-growing economies in the world, averaging an annual growth rate 10.9 percent GDP between 2004 and 2014. This level of economic growth has helped reduce extreme poverty in both urban and rural areas by 9.1 percent from 38.7 percent in 2004-05 to 29.6 percent in 2010-11 (The World Bank Group, 2016). However, because of high population growth, the absolute number of poor has remained unchanged over the past 15 years. Ethiopia has achieved the Millennium Development Goals (MDGs) for child mortality and water and there has also been encouraging progress in gender parity in primary education, HIV/AIDS, and malaria.

Expansion of the services (43 percent) and agricultural (41.4 percent) sectors account for most of Ethiopia's economic growth, while manufacturing sector performance remains relatively modest (15.6 percent). The services sector employs 10 percent of the labor force, with Ethiopian Airlines leading the country's export income. As of 2013, there were 57 airports operating in Ethiopia, with plans in place to expand current major airports, as well as construct new airports. The agriculture sector employs 85 percent of the workforce and the primary products include cereals, coffee, oilseed, cotton, sugarcane, vegetables, khat, cut flowers, hides, cattle, sheep, goats, and fish. Smallholders form the backbone of the sector, and agricultural production is characterized by fragmented and dispersed land holdings.

STATE OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT

In December 2016, USAID/Ethiopia Mission completed 118/119 Tropical Forest/Biodiversity and Climate Risks Challenges and Opportunities assessments as part of its new CDCS preparation. This section documents direct threats to the environment as they relate to USAID programming, biodiversity, and tropical forests. Environmental threats are defined as "threats to processes and actions that may diminish biological diversity, including conversion of natural habitats; overexploitation of valuable species; introduction of invasive species; and environmental change, such as climate change, desertification, and pollution" (USAID 2015a). It also documents the drivers (i.e., root causes) of environmental threats for the purposes of FAA 118/119 analysis. The threats and root causes were identified based on reviewed literature, stakeholder consultations, and the expertise of the Assessment Team and are intended to capture the recent, current, and reasonably foreseeable issues relevant to USAID's 5- to 7-year planning timeline. The threats and drivers include those that are ecological (e.g., climate change, fire, pests), related to human use (e.g., agriculture), or institutional (e.g., failed policy, lack of enforcement) or transboundary issues.

PROTECTED AREAS

The principal mechanism used by Ethiopia to protect biodiversity, ecosystems, and ecological processes has been a network of wildlife conservation areas and priority forest areas. The total area of the wildlife conservation and forest areas is estimated as 15.5 percent of the area of the country, which is above the global and sub-Saharan average for protected area coverage. These areas contain sites set aside mainly for multiple uses. Before the 2016 Forest Sector Development Plan, forest priority areas were no-take areas for conservation only, but this has been changed. Therefore, the changeover to multiple use will offer an opportunity to study the gains or losses associated with the two different management techniques.

The Ethiopian protected area (PA) system contains several categories, including national parks, wildlife reserves and sanctuaries, which were primarily designed for the protection of wildlife resources, and controlled hunting areas and forest priority areas, for the utilization of wildlife and timber resources. The overall effectiveness of most PAs is low, as many areas are not legally gazetted, receive inadequate funding, and are understaffed and ill-equipped, fail to include local communities and stakeholders from the surrounding area, and therefore providing low levels of biodiversity conservation (Vreugdenhil et al., 2012). An example is Bale National Parks where the rate of deforestation is estimated to be 3.4 percent for 2001-2006. The area is the target of the Bale Eco-Region REDD+ project which is helping to facilitate multiple stakeholders in the protection of these vulnerable forests.

FORESTS

Ethiopia has 17 million hectares of forests comprising natural and planted forests and woodlands, with coverage of about 15.5 percent of the country (unreleased data in MEF 2015). The Ethiopian forests and woodlands are seriously threatened by deforestation, habitat destruction, subsequent decline in regeneration, expansion of invasive species, agricultural expansion, and forest fires. The most important threats to forest genetic diversity are deforestation and forest fragmentation. A total of 103 tree and shrub species are considered endangered species according to the International Union for the Conservation of Nature (IUCN) Red List (IUCN, n.d.).

Illegal logging, firewood collection, overgrazing, and invasive species are threats to forests throughout the country. Land use changes, including commercial farming and population pressure, are other threats to forest and rangeland plants.

In order to conserve and promote sustainable utilization of forest and rangeland plant genetic resources, a total of 2,000 accessions of 260 forest species are conserved at gene banks at Ethiopia Biodiversity Institute. Forests are also conserved in PAs, National Forest Priority Areas (NFPAs) and other in situ conservation sites such as area closures, church forests, sacred forests, and community forests. However, because of increasing human and livestock pressure on the resource base and a lack of land use plans, the conditions in PAs, including NFPAs, are deteriorating, or cease to exist except in a few areas To curb some of these problems, some forest areas such as Yayu, Kafa, and Sheka have been designated biosphere reserves and recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO), and 15 in situ sites have been established by EBI in Benishangul-Gumuz, SNNPR, and Oromia Regions.

ECOSYSTEMS AND ECOSYSTEM SERVICES

Ethiopia's biogeography is characterized by two dominant features: the arid areas of the Horn of Africa, with the Ogaden center of endemism and the mesic highland plateaus where climate instability and highland isolation has also resulted in significant endemism. Ethiopia has over 6,000 species of vascular plant (with 625 endemic species), 860 avian species (16 endemic species), 279 species of mammal (35 endemic species), 201 species of reptile (14 endemic species), 23 species of amphibians (all endemic), and 150 freshwater fish species (6 endemic).

Major ecosystems of Ethiopia include:

Afro-alpine Ecosystems (including Ethiopian montane moorlands) are under pressure from growing human and livestock populations in surrounding areas and subsequent expansion of agricultural and grazing lands. Efforts are underway to improve the status of some areas of this ecosystem. For example, the Bale Mountains National Park (BMNP) is legalized and demarcated, and a management plan has been prepared for effective and efficient management of the park (FZS, 2007).

Montane Grassland Ecosystem (including Ethiopian montane moorlands and Ethiopian montane forests) provides livestock husbandry services, which have been intense for years. Livestock density is creating extreme pressures as well as fuel wood demand. As a result, the ecosystem has experienced considerable habitat degradation. The main threats to this ecosystem are agricultural expansion, overgrazing, and overharvesting of selected species. Currently, in Tigray, Amhara, Oromia, SNNPRS, integrated soil and watershed management and area closure measures are being undertaken to rehabilitate degraded areas.

Moist Montane Forest Ecosystem: Human activities such as timber extraction, commercial coffee and tea plantations, small-scale agriculture, and grazing expansions and settlement are the major threats to this ecosystem. The ecosystem is dominated by tree species with seeds that do not survive drying and freezing during ex-situ conservation. Despite the above pressures, regional governments are taking various measures to manage and maintain the ecosystem. Some of the forest areas are given to concession for joint government and community management where local communities are organized and encouraged to work and obtain benefits from non-timber forest products. Consequently, illegal timber cutting and wood collection have been reduced. Because of inadequate data, however, it is difficult to document trends in these forests.

Lowland Tropical Forest Ecosystem: The lowland tropical forest ecosystem is facing pressure from settlements and agricultural expansion. Furthermore, slash and burn agriculture has contributed to the shrinkage of this ecosystem. Consequently, many wild animals including large mammals such as antelopes are under threat. Conservation measures that have been taken include formulation of forest legislation, preparation of management plans, establishment of conservation areas, and implementation of Participatory Forest Management. East African and Horn of Africa Acacia Savannas (including Northern and Somali Acacia-Comminphora bushlands and thickets, East Sudanian savanna, Sahelian Acacia savanna, Victoria Basin Forest-savanna mosaic):

Acacia-Commiphora Woodland Ecosystem: Expansion of large-scale agriculture, cotton, sugar cane and biofuel plantations are the major development activities taking place. They are recent phenomena contributing to land degradation and loss of biodiversity. Intense fuelwood collection and charcoal-making and expansion of invasive alien species have also contributed to the loss of species diversity and habitat degradation. Although limited, measures are being taken to minimize or halt the invasive species, especially Prosopis. Efforts are also being made to designate some protected areas. Re-demarcation activities such as those at Awash and Abijata-Shalla National Parks are also being carried out to ensure effective management.

Combretum-Terminalia Woodland Ecosystem: Encroachment and expansion of small- and large-scale agriculture for crops such as sugar cane, cotton, sesame, rice, and biofuel plantations are aggressively undertaken in this ecosystem. Furthermore, overgrazing and shifting cultivation are causing deterioration of the ecosystem. Consequently, many wild animals (including lion, cheetah, giraffe, and buffalo) and unique plants such as Vitellaria paradoxa, Oxythaenthara abysinica, and Boswellia papyrifara are under threat. To address the threats, different efforts including forest plantations, implementation of Participatory Forest Management, awareness-raising, demarcation and designation of protected areas such as Alatish, Qafta Shiraro, Anbessa Chaka, and Gambela National Parks are under way in this ecosystem.

Dry Evergreen Montane Forest and Evergreen Scrub Ecosystem: This ecosystem is under severe threat of habitat conversion caused by deforestation for wood products (especially for fuelwood) and agricultural expansion, overgrazing, and fire. However, the regional governments are taking various measures to improve the management status of this ecosystem. In Adaba Dodola Wereda, Oromia Region, for example, forest concessions are jointly administered by government and community through benefit-sharing arrangements, carbon trade, and other incentive measures. These interventions are aimed at increasing the participation and responsibilities of local communities in the management and conservation of natural resources.

Desert and Semi-desert Shrubland Ecosystem: Overgrazing, bush encroachment, and invasive species such as Prosopis juliflora and Acacia drepanolobium in the Eastern and Southern lowlands of Ethiopia are among the factors threatening the desert and semi-desert shrubland ecosystem. Expansion of small- and large-scale farming of palm, sugar cane, and cotton are major activities taking place in this ecosystem. Furthermore, widespread firewood collection and charcoal-making have contributed to the deterioration of this ecosystem.

Wetland Ecosystems: Wetland biodiversity is under severe pressure as human exploitation of this resource increases. Further, climate change has increasingly become real, causing droughts, floods, and, in general, extreme variability. Wetland ecosystems are under pressure from uncontrolled conversion of the ecosystem to agriculture (especially for rice production), overexploitation of wetland resources, deforestation, soil erosion and land degradation, siltation, climate change, and pollution. The Fogera and Chefa wetlands in Amhara Region are, for example are highly affected by excessive use of swamps and floodplains for cultivation of rice and other horticultural crops. Lake Haromaya and the Boye-kito wetland near the town of Jimma have been totally lost, and Lake Cheleleka in the town of Bishoftu has shrunk due to agricultural expansion and urbanization. Efforts are being made in some regions such as Oromia, Amhara,

and SNNPR to tackle these threats. To manage the Wichl wetland found in Illuababor Zone (Oromia Region), for example, integrated watershed management, livelihood improvement, and family planning efforts are underway.

Aquatic Ecosystem: In Ethiopia, aquatic ecosystems are highly affected by various anthropogenic activities such as pollution, sedimentation, eutrophication, diversion of water, and overexploitation of fish stocks. Damming and diversion of rivers, channeling and building of water distribution facilities, removal of riparian vegetation cover, mining, and similar activities are playing destructive roles in changing this ecosystem. Invasive species such as water hyacinths are also becoming threats to this ecosystem. Conservation efforts directed to the ecosystem are minimal, and Rift Valley lakes in particular are in great danger. The current trend at Lake Abijata for example, suggests that the lake could dry up in the near future due to diversion for irrigated agriculture, soda ash plants, and damming (Fekadu, 2013).

CLIMATE

Home to 90 million people, Ethiopia is one of the most drought-prone countries in the world. The sizeable population and high growth rate have exacerbated the levels of food insecurity and conflict over natural resources. Chronic food insecurity impacts over 10% of the country's population, rendering Ethiopia particularly vulnerable to climate risk. Drought is the most destructive climate-risk threatening Ethiopia with current estimates predicting a GDP of 10% by 2045 as a result of climate change. The agricultural sector, which accounts for approximately 85% of the Ethiopian population's livelihoods is heavily reliant on rainfall. However, predictions in Ethiopia suppose erratic rainfall and increased unpredictability of seasonal rains. Projections also note an increased incidence of drought and other extreme events, posing risks to human health and water quality, in addition to impacting agriculture and livestock . Additionally, climate change is linked to an increase in the frequency of water and food-borne infectious diseases because of the inadequate supply of clean drinking water. Higher temperatures, erratic rainfall, and more frequent extreme weather events will continue to stress Ethiopia's adaptive capacity to respond efficiently and effectively to the climate risks posed.

ENVIRONMENTAL DEGRADATION DRIVERS AND THREATS

USAID/Ethiopia Mission recently (2016) completed a 118/119 assessment as part of its new CDCS preparation. This section documents direct threats to the environment as they relate to USAID programming, biodiversity, and tropical forests. Environmental threats are defined as "threats to processes and actions that may diminish biological diversity, including conversion of natural habitats; overexploitation of valuable species; introduction of invasive species; and environmental change, such as climate change, desertification, and pollution" (USAID 2015a). It also documents the drivers (i.e., root causes) of environmental threats for the purposes of FAA 118/119 analysis. The threats and root causes were identified based on reviewed literature, stakeholder consultations, and the expertise of the Assessment Team and are intended to capture the recent, current, and reasonably foreseeable issues relevant to USAID's 5- to 7-year planning timeline. The threats and drivers include those that are ecological (e.g., climate change, fire, pests), related to human use (e.g., agriculture), or institutional (e.g., failed policy, lack of enforcement) or transboundary issues. Annex 1 includes a list of Drivers and Threats identified in the 118 119 Analysis.

2.2 APPLICABLE AND APPROPRIATE PARTNER COUNTRY AND OTHER INTERNATIONAL STANDARDS (E.G. WHO), ENVIRONMENTAL AND SOCIAL LAWS, POLICIES, AND REGULATIONS

NATIONAL ENVIRONMENTAL POLICIES AND PROCEDURES

The overall policy goal of the National Environmental Policy of Ethiopia (NEPE) is to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

The concept of sustainable development and environmental rights are enshrined in article 43, 44 and 92 of the Constitution of the Federal Democratic Republic of Ethiopia (FDRE).

- In Article 43: The Right to Development, where peoples' right to: improved living standards and to sustainable development, participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community, and the enhancement of their capacities for development and to meet their basic needs, are boldly recognized.
- In Article 44: Environmental Rights, all persons are entitled to: live in a clean and healthy environment, Compensation, including relocation with adequate state assistance.
- In Article 92: Environmental Objectives it is declared that, the government shall ensure that all Ethiopians live in a clean and healthy environment, programs and projects design shall not damage or destroy the environment, peoples have the right to full consultation and expression of views, and government and citizens have the duty to protect the environment.

The Environmental Policy of Ethiopia (EPE, 1997), provides a number of guiding principles that indicate and require a strong adherence to sustainable development. In particular environment assessment (EA) policies of the EPE include, among other things, the need to ensure that EA: considers impacts on human and natural environments, provides for an early consideration of environmental impacts in projects and programs design, recognizes public consultation, includes mitigation plans and contingency plans, provides for auditing and monitoring, are a legally binding requirement,

The corresponding main policy documents and regulations are summarized in the following section.

ENVIRONMENTAL IMPACT ASSESSMENT PROCLAMATION (NUMBER 299, DATED 2002)

The "Environmental Pollution Control Proclamation (Proc. no. 300/2002)" is promulgated with a view to eliminate or, when not possible to mitigate pollution as an undesirable consequence of social and economic development activities. This proclamation is one of the basic legal documents, which need to be observed as corresponding to effective EA administration. The main reasons for enacting this Proclamation are indicated below. Environmental Impact Assessment serves to bring about thoughtful development by predicting and mitigating the adverse environmental impacts that a proposed development activity is likely to cause as a result of its design, location, construction, operation, modification and cessation. A careful assessment and consideration of the environmental impacts of public documents prior to their

approval, provides an effective means of harmonizing and integrating environmental, economic, social and cultural considerations and aspirations into the decision-making process in a manner that promotes sustainable development. Implementation of the environmental rights and objectives enshrined in the Constitution requires the prediction and management of likely adverse environmental impacts, ways in which the benefits might be maximized, and the balancing of socio-economic benefits with environmental costs. Environmental impact assessment serves to bring about administrative transparency and accountability, as well as involve the public and, in particular, communities in development planning decisions which may affect them and their environment.

The enactment of these Proclamations will help much in the effort to bring about sustainable development in the country by ensuring that development programs, projects and activities do not cause negative impacts on the natural resource base and the environment in general.

NATIONAL BIOSAFETY FRAMEWORK (ENVIRONMENTAL PROTECTION AUTHORITY, 2007)

The National Biosafety Framework aims at raising public awareness and building technical and scientific capacity as well as in the development of a legal framework that deals with risks emanating from GMOs and products thereof, and in making informed decisions on biosafety. It is a combination of:- Government policy provisions on Biosafety in various policy documents. The current policy direction to the framework is in the Environmental Policy of Ethiopia. The policy incorporates sectoral as well as cross sectoral environmental policy provisions which are set in place to ensure the sound management and use of natural resources and the environment. This Environmental Policy is based on the Constitution and the Conservation Strategy. The National Biotechnology Policy and the Science and Technology policy are also consistent with the Environmental Policy.

A regulatory regime which is based on the Precautionary Principle set to protect human and animal health, biological diversity and the environment at large by preventing or managing down to levels of insignificance the adverse effects of GMOs and products thereof. This includes a biosafety law and directives governing the movement of GMOs and their products. An administrative system to handle notification or request for authorization from the designated Authority after submitting an application along with a risk assessment report for all research and development activities, import, export, transit, handling, release, contained use, transport, placing on the market, use as a pharmaceutical for humans or animals, or use as food, feed or for processing of any GMO or products thereof. A mechanism for enforcement and monitoring that needs to be incorporated on any application to be engaged in GMO related activities. This includes a clear and sequential description of all the steps to be taken during the implementation of a project that uses GMOs or their products, monitoring and evaluation that will be made at the end of each step, methods of waste disposal as well as emergency measures in cases of accidental release. This is a mechanism for public awareness and participation which ensures that the public is made aware and take part in decision making for any application of a GMO or products thereof.

PRODUCTIVE SAFETY NET PROJECT PHASE IV:

The Productive Safety Net Project (PSNP) Phase IV is a program created by the Government of Ethiopia to alleviate food insecurity in rural, poverty-stricken, drought-prone regions of the

country. Through the four iterations of the program, the PSNP is designed to support the transition to a system of integrated social protection by targeting, monitoring and building the capacity of the protection and DRM systems, as well as provide safety net transfers to targeted rural households. PSNP IV specifically targets chronically food insecure, vulnerable households in Ethiopia. This policy keeps in mind the potential environmental sensitivities restraining economic growth and food security in the country.

PSNP IV subprojects are labor-intensive, community-based activities designed contribute to watershed development, respond to the needs of Climate Change, Disaster Risk Management and Ethiopia's Nutrition policy, and to provide employment for chronically food insecure people who have "able-bodied" labor. The Programme Implementation Manual (PIM) requires that to be eligible for financing under the PSNP, the subprojects must be environmentally sound. It specifies that projects should be adapted to local conditions and protect the environment. They should be based on sound technical advice, and adequate technical supervision should be available to ensure the quality of work.

2.3 COUNTRY/MINISTRY/MUNICIPALITY ENVIRONMENTAL CAPACITY ANALYSIS (AS APPROPRIATE)

The system of Government of the Federal Democratic Republic of (GFDRE) is quite decentralized. The country follows a parliamentary form of government. The Federal GFDRE consists of nine National Regional States (NRSs) delimited on the basis of the settlement patterns, language, identity and consent of the concerned communities (Articles 45, 46, 47 of the Federal Constitution). Within the NRSs there are zonal and woreda (District) administrative levels, with the Woredas being the important levels where local self-government is exercised.

According to the Federal Constitution, all powers not given expressly to the Federal government alone or concurrently with the NRSs are reserved to the states. Thus, the states have the power to enact and execute their own constitution and other laws as well as formulate and execute their economic, social and development policies, strategies and plans. However, they can only administer land and other natural resources in accordance with Federal laws (Article 52). They have the power to collect royalty from forest resources as well as share royalty from mining, gas, and petroleum operations with the federal government.

The Woredas powers include examining and approving draft economic development, social services as well as working plans and programs. In particular they are responsible for following up on agricultural development activities that are undertaken consistent with the appropriate season and that conservation and care of natural resources is carried out with special attention. In general, the decentralized system is expected to facilitate environmental management through ensuring the political, economic and social empowerment of citizens at all levels. This is particularly important for community and village levels to enable them to lead developments in their areas.

ETHIOPIAN MINISTRY OF ENVIRONMENT, FOREST, AND CLIMATE CHANGE (MEFCC)

MEF was established in 2012 to be in charge of the rights and obligations of the Environmental Protection Authority (EPA) of Ethiopia which was re-established under the existing proclamation No. 295/2002, and the forest sector which used to be under Ministry of Agriculture (MOA).

The new ministry is developing policies and strategies to undertake multi-pronged activities to protect the environment and boost forest coverage at all levels of the government structure together with various stakeholders. MEF's plans will be in line with the country's Growth and Transformation Plan (GTP). The ministry will also give due attention to climate change related threats to contribute to the realization of a truly climate resilient green economy (CRGE). The green economy may not happen only via forest development, but the ministry believes that forest development can play a significant role in realizing green economy when undertaken together with environmental protection schemes. MEFCC objective is formulating policies, strategies, laws and standards which foster social and economic development in a manner that enhance the welfare of humans and the safety of the environment sustainably and to spearhead their implementation.

MINISTRY OF AGRICULTURE (MOA)

The MOA, which has been recently combined with the Ministry of Rural Development, is a major lead organization at the Federal level in terms of (renewable) natural resources management since it has mandates regarding the management of forest and wildlife resources as well as the protection and conservation of soil resources. Moreover, it is also responsible for land use planning. The fact that this part of the MOA's mandate is dominated by agriculture has been pointed out on many occasions by natural resources management experts. Indeed, all major natural resources management activities are lumped together under a single department. Such major activity areas as forestry, soil conservation, and land use planning have been reduced to team levels.

THE ETHIOPIAN INSTITUTE FOR AGRICULTURAL RESEARCH (EIAR)

This organization both carries out research and coordinates research activities carried out at the NRS levels. The research it carries out to improve agricultural production also has relevance to natural resources management (e.g. better soil conservation measures).

MINISTRY OF WATER RESOURCES

The Ministry of Water Resources was established under Article 4 (15) of Proclamation No 256 of year 2000. Unlike some other ministries and other types of federal executing agencies, the Ministry of water development is not under another super ministry. The Ministry has under it several departments and units. The Ministry functions through these departments and units to attain its mandates. There are also autonomous entities operating under the Ministry. An example is the Water Works Design and Supervision Enterprise established by virtue of the Council of Ministers Regulations No. 42 of year 1998. The Water Works Design and Supervision Enterprise are governed by the Public Enterprises Proclamation No. 25/1992 and the Ministry of Water Resources is its supervising body.

INSTITUTE OF BIODIVERSITY CONSERVATION AND RESEARCH

This institute is responsible for the conservation of biodiversity both *ex-situ* and *in-situ* and carrying out research with regard to the same. The need to coordinate sectoral institutions concerned with biodiversity is also recognized. Hence, a number of institutions at both Federal and regional levels are directly or indirectly involved in ecosystem protection. At the Federal level the most important ones include the Institute of Biodiversity Conservation and Research (IBCR), the Ethiopian Wildlife Organization (EWCO), the Ministry of Agriculture where mandate for Natural Resources is vested, and EPA.

3.0 ANALYSIS OF POTENTIAL ENVIRONMENTAL RISK[3]

This section describes the results of an analysis of activities/project elements for potential adverse environmental, social, and climate impacts.

PROJECT/ACTIVITY 1: PRIVATE SECTOR LED ECONOMIC TRANSFORMATION

TABLE 3. POTENTIAL IMPACTS – PROJECT/ACTIVITY 1

Project/Activity: Private Sector Led Economic Transformation	**Potential environmental and social impacts**
Sub-activity 1.1: Policy Dialogue, Development and Implementation (PDDI)	Potential environmental and social impacts associated with policy dialogue are mostly indirect. Indirect impacts include: "process capture," or control of policy priorities by one group's interests. For example, equitable allocation of water resources can be dependent on who is allowed to participate. This could also include the misrepresentation of climate risks and the need for basic education on resilience risk management. Policy dialogue will include education that enables environmental private sector investment. In addition to the prioritization of group interests, there is also the risk of stimulated engagement with one sector (ex. NRM, Ag.) can lead to overexploitation of the available resources.
Sub-activity 1.2: GTN mid-term evaluation	Minimal expected environmental and social impacts
Sub-activity 1.3: Impact Evaluation of FTF Programs in Ethiopia	Minimal expected environmental and social impacts
Sub-activity 1.4: Midterm Evaluation of Feed the Future Ethiopia Value Chain Activity	Minimal expected environmental and social impacts
Sub-activity 1.5: Horticulture Value Chain Activity	The environmental and social impacts associated with the horticulture value chain include natural resource management (NRM) and food security concerns. Increased financial assistance into horticulture can result in farm operation expansion, land-use changes, overexploitation of the soil, introduction and overuse of agro-inputs (fertilizers, pesticides, etc.), and increased mechanization and irrigation. Financing new seed development can introduce non-native species to the ecosystem, which can threaten endemic species and act as a pest These types of changes can impact land quality, water quality, and human health and safety.
Sub-activity 1.6: Youth Employment and Urbanization	The impacts of the planned urbanization program includes construction, land-use changes, education, and peacebuilding, many of which have environmental and social impacts.

[3] Includes analysis of environmental and social risk

	Land use changes and urban planning can have impacts such as: introduction of exotic species, soil erosion, reduction in soil fertility, reduction in water quality, and biodiversity loss. Increasing employment and financing into the FtF Zones of Influence can have the potential to change can lead to the development of Micro and Small Enterprises (MSE), which can lead to environmental damage. MSEs lack some of the infrastructure associated with human health and safety, such as sanitation and waste disposal facilities. MSEs can also be pollution-intensive, increasing the potential for chemical and hazardous waste pollution, air pollution, water pollution, soil erosion, natural resource depletion, solid waste/garbage, odor, noise, and health and safety risks. Depending on the grants provided, financing through grants can have similar associated potential impacts.
Sub-activity 1.7: Financial Inclusion Activity	The environmental and social impacts of agricultural financial inclusion and technical assistance include introduction of exotic species, soil erosion, reduction in soil fertility, reduction in water quality, and biodiversity loss. Increasing employment and financing into the FtF Zones of Influence can have the potential to change can lead to the development of Micro and Small Enterprises (MSE), which can lead to environmental damage. MSEs lack some of the infrastructure associated with human health and safety, such as sanitation and waste disposal facilities. MSEs can also be pollution-intensive, increasing the potential for chemical and hazardous waste pollution, air pollution, water pollution, soil erosion, natural resource depletion, solid waste/garbage, odor, noise, and health and safety risks. Depending on the grants provided, financing through grants can have similar associated potential impacts. Potential environmental and social impacts associated with policy reform are mostly indirect. Indirect impacts include: “process capture,” or control of policy priorities by one group’ interests. For example, equitable allocation of water resources can be dependent on who is allowed to participate. This could also include the misrepresentation of climate risks and the need for basic education on resilience risk management.
Sub-activity 1.8: Women’s Economic Empowerment	Minimal expected environmental and social impacts
Sub-activity 1.9: Fortification	The environmental and social impacts of fortification include introduction of exotic species, soil erosion, reduction in soil fertility, reduction in water quality, and biodiversity loss. Other direct impacts arising from storage techniques include health and safety risks to farmers or farm workers. These risks are heightened when considering certain post-harvest processing technologies, such as grinding or milling.

4.0 ENVIRONMENTAL DETERMINATIONS

The DO3 activities covered by this IEE (see Table 1) are assigned the Threshold Determination of Negative as some activities have foreseeable environmental impacts that require mitigation.

Many DO3 activities fall under 216.2(c)(2) and are eligible for a pre-determination categorical exclusion from further analysis within this IEE as they do not have an effect on the natural or physical environment, or they are research activities that have a limited scope and are carefully controlled with effective monitoring. Activities that offer technical assistance, build capacity through training and education, offer analysis or academic studies and surveys, and transfer information or data, do not have foreseeable impact on the environment unless the support leads to direct action or effects on the environment or on social constructs. Topics specific to these training, capacity building, training, and educational efforts which have no recognizable link to environmental or social impacts include cost effective models to organize themselves, financing, business plan development, education, and training.

In summary, the following activities have low or no environmental impact. These activities also coincide with those eligible for pre-determination categorical exclusions as excerpted from 22 CFR 216.2(c)2:

i. Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.);

ii. Controlled experimentation exclusively for the purpose of research and field evaluation which are confined to small areas and carefully monitored;

iii. Analyses, studies, academic, or research workshops and meetings;

iv. Projects in which A.I.D. is a minor donor to a multi-donor project and there are no potential significant effects upon the environment of the United States, areas outside any nation's jurisdiction or endangered or threatened species or their critical habitat;

v. Document and information transfers;

viii. Programs involving nutrition, health care or population and family planning services except to the extent designed to include activities directly affecting the environment (such as construction of facilities, water supply systems, wastewater treatment, etc.);

xi. Programs of maternal or child feeding conducted under Title II of Pub. L. 480;

xiii. Matching, general support, and institutional support grants provided to private voluntary organizations (PVOs) to assist in financing programs where A.I.D.'s objective in providing such financing does not require knowledge of or control over the details of the specific activities conducted by the PVO;

xiv. Studies, projects, or programs intended to develop the capability of recipient countries to engage in development planning, except to the extent designed to result in activities directly affecting the environment (such as construction of facilities, etc.); and,

xv. Activities which involve the application of design criteria or standards developed and approved by A.I.D.

Activities with potential impacts on the environment are recommended for a Negative Determination threshold determination and are assigned associated conditions. When implemented inefficiently, these activities may cause adverse impacts that can offset or eliminate the intended benefits. Mitigating environmental impacts with these activities requires a participatory approach to activity/program design and management.

4.1 RECOMMENDED ENVIRONMENTAL CONDITIONS

The following table summarizes the recommended conditions based on the environmental analysis conducted. Upon approval, these determinations become affirmed, per 22 CFR 216. Specified conditions, detailed in Section 5, become mandatory obligations of implementation, per ADS 204.

The conditions noted in Table 4 are a minimum set of AFR BEO mandatory conditions or mitigation measures that must be addressed in the EMMP and implemented by the partners. However, partners are expected to conduct their own analysis of impacts and associated mitigation measures in their activity specific EMMP that will elaborate and build upon the minimum set of conditions noted in Table 4. As noted in the BEO Specific Conditions of Approval also must be met.

TABLE 4: RECOMMENDED CONDITIONS

Project/Activities:	Conditions
Project 1: Private Sector Led Economic Transformation	
Sub-activity 1.1: Policy Dialogue, Development and Implementation (PDDI)	**Associated Conditions:** 1. Policy development must integrate or otherwise reflect current data and analysis on environmental trends, including principles of sustainable NRM and GCC adaptation strategies. Data and analysis may be drawn from USAID, other bilateral donor agencies, International Financial Institutions, Multilateral Development Banks, or other internationally recognized research or development entity.
Sub-activity 1.2: GTN mid-term evaluation	**No associated conditions.**
Sub-activity 1.3: Impact Evaluation of FTF Programs in Ethiopia	
Sub-activity 1.4: Midterm Evaluation of Feed the Future Ethiopia Value Chain Activity	
Sub-activity 1.5: Horticulture Value Chain Activity	**Associated Conditions:** I. Food security and seed introduction. Land preparation and cultivation activities shall integrate best management practices (BMPs) reflecting local soil conditions, climate and hydrology in order to reduce erosion

	(wind and water) and limit potentially nutrient-rich agricultural run-off. BMPs must be consistent with the principles of environmental management as detailed in the USAID *Sector Environmental Guideline* for agriculture, available at: https://www.usaid.gov/sites/default/files/documents/1860/SectorEnvironmentalGuidelines_DrylandAgriculture.pdf. 2. Per FAA 118, training in soil and water conservation techniques or improved agronomic practices may not promote the introduction of exotic plant species not already cultivated in the area, where there is any reasonable chance that this may facilitate their introduction or spread within a protected area. 3. The selection and introduction of new crops for cultivation must be consistent with sound agricultural practices and reflect local environmental conditions, with particular emphasis on the quality and quantity of water and soil resources 4. USAID/Ethiopia cannot introduce or support any bio-engineered or GMO products (e.g., seeds, cuttings, etc.) without preparation of an amendment to this IEE governing such activities. As applicable, USAID/Ethiopia will be required to complete USAID's bio-safety review process. 5. To protect worker health and safety the introduction, promotion of and/or training in post-harvest crop handling and/or storage techniques shall demonstrate and advocate the wearing of appropriate Personal Protective Equipment (PPE) (e.g., boots, gloves, respirator, safety goggles, etc.). 6. Training and, as appropriate, organizational capacity-building will integrate and promote general awareness of the environmental, health and safety risks presented by agriculture, and dairy activities, and appropriate choices and measures to manage these risks including disposal. This includes veterinary pharmaceutical services, although those services should be administered by a trained professional whenever possible. Pesticide procurement, training, and/or use must be accompanied with an approved PERSUAP. 7. Programs and activities will comply with host-government environmental requirements, legislation and standards. Furthermore, where appropriate, technical assistance and training will include environmental awareness and sensitivity components, including exposure to the principles and procedures of Environmental Impact Assessment (EIA) 8. The implementation of any loan- or grant-making initiative or facility will be contingent on the integration of the formal AFR sub-project/sub-grant review process. The AFR Environmental Review Form (available below in Annex 7).
Sub-activity 1.6: Youth Employment and Urbanization	**Associated Conditions:** Equity and lines of credit for microfinance institutions, rural savings and credit cooperatives 1. Programs and activities will comply with host-government environmental requirements, legislation and standards. Furthermore,

	where appropriate, technical assistance and training will include environmental awareness and sensitivity components, including exposure to the principles and procedures of Environmental Impact Assessment (EIA) 2. The implementation of any loan- or grant-making initiative or facility will be contingent on the integration of the formal AFR sub-project/sub-grant review process. The AFR Environmental Review Form (available) must be completed and approved prior to the award or disbursement of any loan or grant funds. Policy dialogue 1. Policy development must integrate or otherwise reflect current data and analysis on environmental trends, including principles of sustainable NRM and GCC adaptation strategies. Data and analysis may be drawn from USAID, other bilateral donor agencies, International Financial Institutions, Multilateral Development Banks, or other internationally recognized research or development entity.
Sub-activity 1.7: Financial Inclusion Activity	**Associated Conditions:** Agricultural investments and financing 1. In facilitating public-private agricultural investments, environmental, health and safety risks (EHS), compliance with GOE laws and regulations, and appropriate management practices to control these risks must be fully integrated and considered. This must include identifying the need for EIA permits and licenses under the government of Ethiopia. 2. Support to Farm Service Centers should include training and, as appropriate, organizational capacity-building to integrate and promote general awareness of the environmental, health and safety risks presented by agriculture, and dairy activities, and appropriate choices and measures to manage these risks including disposal. This includes veterinary pharmaceutical services, although those services should be administered by a trained professional whenever possible. 3. Pesticide procurement, training, and/or use must be accompanied with an approved PERSUAP. Equity and lines of credit for microfinance institutions, rural savings and credit cooperatives 1. Programs and activities will comply with host-government environmental requirements, legislation and standards. Furthermore, where appropriate, technical assistance and training will include environmental awareness and sensitivity components, including exposure to the principles and procedures of Environmental Impact Assessment (EIA) 2. The implementation of any loan- or grant-making initiative or facility will be contingent on the integration of the formal AFR sub-project/sub-grant review process. The AFR Environmental Review Form (available) must be completed and approved prior to the award or disbursement of any loan or grant funds. Policy dialogue 1. Policy development must integrate or otherwise reflect current data

	and analysis on environmental trends, including principles of sustainable NRM and GCC adaptation strategies. Data and analysis may be drawn from USAID, other bilateral donor agencies, International Financial Institutions, Multilateral Development Banks, or other internationally recognized research or development entity.
Sub-activity 1.8: Women's Economic Empowerment	**No associated conditions.**
Sub-activity 1.9: Fortification	**Associated Conditions:** Seed introduction and system strengthening 1. Land preparation and cultivation activities shall integrate best management practices (BMPs) reflecting local soil conditions, climate and hydrology in order to reduce erosion (wind and water) and limit potentially nutrient-rich agricultural run-off. BMPs must be consistent with the principles of environmental management as detailed in the USAID Sector Environmental Guideline for agriculture, available at: https://www.usaid.gov/sites/default/files/documents/1860/SectorEnvironmentalGuidelines_DrylandAgriculture.pdf. 2. Per FAA 118, training in soil and water conservation techniques or improved agronomic practices may not promote the introduction of exotic plant species not already cultivated in the area, where there is any reasonable chance that this may facilitate their introduction or spread within a protected area 3. The selection and introduction of new crops for cultivation must be consistent with sound agricultural practices and reflect local environmental conditions, with particular emphasis on the quality and quantity of water and soil resources 4. USAID/Ethiopia cannot introduce or support any bio-engineered or GMO products (e.g., seeds, cuttings, etc.) without preparation of an amendment to this IEE governing such activities. As applicable, USAID/Ethiopia will be required to complete USAID's bio-safety review process.

4.2 CLIMATE RISK MANAGEMENT

The climate risk assessment for this IEE (also see attached Annex 2 and Annex 4 for the CRM table) is based on the USAID Climate Risk Screening and Management Tool for Project Design (U.S. Climate Resilience Toolkit**:** https://toolkit.climate.gov/)

Resources for Climate Risk Management:

- Current USAID/Ethiopia CDCS (2019-2024);[4]
- Activity List and Other relevant Documents for DO1;
- USAID Climate Risk Management Toolkit;[5]

[4] USAID/Ethiopia. *Country Development Cooperation Strategy: July 2019 – July 2024.*
[5] Climate Risk Screening & Management Tools." USAID. January 2017. Accessed October 2019 from: https://www.climatelinks.org/resources/climate-risk-screening-management-tool.

- IFPRI: climate change impacts on crop yields in Ethiopia (2019);[6]
- World Bank Climate Change Knowledge Portal: Ethiopia (2019);[7]
- Tigabie, Abiro, "Economic Impacts of climate change in Ethiopia" (2018);[8]
- NOAA, "Malaria risk zones expand to higher elevations in Ethiopian highlands" (2017).[9]
- USAID/Ethiopia Climate Change Risks and Opportunities Report (2016)[10].
- USAID Climate Change Risk profile—Ethiopia (2016)[11];

The climate risk analysis established that climate risks were low for most project elements, except for the following interventions:

- Encouraging farmers to adopt good agricultural practices;
- Linking nutrition, food security, and livelihoods interventions;
- Increasing access, availability, and utilization of horticultural crops;
- Improving access to inputs for horticulture;
- Reducing conflict in land governance and the expansion of communal land-tenure;
- Programming targeted towards internal migrants;
- Providing engineering and technical services for construction oversight and monitoring support;
- Enriching staple foods with micronutrients;
- Encouraging smallholder farmers to shift to high-yielding hybrid varieties of maize.

For these components, climate risk was ranked as moderate or high, requiring that risk management options be identified and implemented. Changing climatic conditions such as increased frequency of droughts and floods may affect the locations of, participants and administrators involved in, and activities related to increasing private sector engagement; the degree to which planned activities are able to effectively meet their objectives; reduce water quality and/or supply for agricultural and WASH activities; reduce supply of targeted foods or inputs; reduce the ability to form linkages between interventions; increase strain on resources or availability of land; increase rates of internal displacement; damage key locations for infrastructure or cause the premature deterioration of said infrastructure; increase the risk of heat-related exhaustion of other health risks for workers; or disrupt procedures for fortifying staple products. Accordingly, climate-proofing of these interventions is therefore required.

The recommended climate risk management actions include integrating education on climate change and variability into planning of interventions; considering exposure to climate-related events when planning activities; increase awareness about implications of climate change; ensuring timely communication of changing weather conditions to participants of in-person programming; look to indigenous knowledge and practices for opportunities to increase climate

[6] Thomas et al. "Climate change impacts on crop yields in Ethiopia." *IFPRI,* 2019.
[7] World Bank Climate Change Knowledge Portal: Ethiopia Profile. World Bank. 2019. Accessed October 2019 from https://climateknowledgeportal.worldbank.org/country/ethiopia/climate-data-historical.
[8] Tigabie, Abiro. "Economic Impacts of climate change in Ethiopia." International Journal of Agriculture, Environment, and Bioresearch, Vol 3, No. 02, 2018.
[9] Scott, Michon. "Malaria risk zones expand to higher elevations in Ethiopian highlands." NOAA, September 6, 2017, retrieved 19 September 2019 from https://www.climate.gov/news-features/featured-images/malaria-risk-zones-expand-higher-elevations-ethiopian-highlands.
[10] "USAID/Ethiopia Climate Change Risks and Opportunities Report." USAID, December 2016.
[11] "Ethiopia Climate Change Risk Profile." USAID, July 2016. Accessed September 2019 from https://www.climatelinks.org/resources/climate-change-risk-profile-ethiopia.

resilience; identify opportunities to strengthen supply chains; encourage access to use of climate services (data, information, communication); reviewing site or activity-specific assessment of potential climate risks to planned activities; and deferring climate risk management to the engineer of record for any construction activities. Where climate risks were **rated moderate and new procurements will occur**, climate risk management results and mitigation activities will be included in procurement language and evaluated during contract award. For **ongoing projects that received climate risk ratings of moderate**, climate risk management will be incorporated into work plans and MEL plans as needed. Climate risks as well as recommendations for climate risk management options and next steps for activity implementation are further detailed in the Climate Risk Management screening (Annex 4).

5.0 CONDITIONS AND MITIGATION MEASURES

5.1 BEO SPECIFIC CONDITIONS

1. **Reporting Conditions:** Due to the high level (Development Objective) of the analysis and breadth of the intervention categories addressed in this IEE, it is difficult to fully describe the actions that will occur in this program and their likely environmental impacts. For this reason, DO-level IEEs are generally discouraged. Rather than ask that this IEE be replaced by several lower-level ones, the AFR BEO requests, as a condition of approval, that the program manager provide access to the Regional Environmental Advisor (REA) and to the AFR BEO Team to review (not approve) the Environmental Mitigation and Monitoring Plans/Reports (EMMPs/EMMRs) that will be written to implement the findings of this IEE. These should be uploaded into a Google Drive folder(s) here: https://drive.google.com/drive/folders/1q7HGMzgopJ-MuKxkQEJ4GSPp9R7Qzv-5?usp=sharing, in the appropriate sub-folder. This will facilitate access by all parties who need these documents, including the Mission Environmental Officer and the AOR/COR. This will allow the REA and the BEO Team to spot-check and review these documents to confirm that the mitigations seem appropriate and are cognizant of the specific design of the activities.

   The negative determinations recommended in this IEE are contingent on full implementation of specified conditions and a set of general monitoring and implementation requirements specified in this "BEO Conditions" section as well as Section 5 of the IEE. Some specific conditions to highlight include:

   - New activities and those revised to incorporate a change in scope or nature will require an IEE amendment to identify and address potential environmental impacts. This condition is mentioned again in Section 7 of this IEE.
   - Mitigation measures need to be determined for the environmental impacts at the level of the EMMP/EMMR. These EMMPs/EMMRs will be shared with the REA and the BEO Team (and other mission stakeholders, as appropriate) in a Google Drive folder.

2. **Conditions for Extension:** This IEE is approved for approximately two years, rather than the more typical five-year length, also in response to the fact that the IEE was prepared at such a high level. The Mission may submit a recommendation for an IEE extension when the Mission demonstrates that partners are completing meaningful and detailed analysis of environmental impacts and are designing and implementing appropriate mitigation measures through their EMMPs. If consultations between the Mission, the REA and the BEO identify insufficiencies in this IEE, additional analysis and potentially additional mitigating conditions may be required through an amendment of this IEE or through a stand-alone Supplemental IEE

5.2 CONDITIONS

The environmental determinations in this IEE are contingent upon full implementation of the following general implementation and monitoring requirements, as well as ADS 204 and other relevant requirements.

5.2.1 During Pre-Award:

5.2.1.1 Pre-Award Briefings: As feasible, the design team and/or the cognizant environmental officer(s) (e.g., MEO, REA, BEO) will provide a pre-award briefing for potential offerors on environmental compliance expectations/responsibilities at bidders' conferences.

5.2.1.2 Solicitations: The design team, in coordination with the A/CO, will ensure solicitations include environmental compliance requirements and evaluation criteria. A/CO will ensure technical and cost proposal requirements include approach, staffing, and budget sufficient for complying with the terms of this IEE.

5.2.1.3 Awards: The A/COR, in coordination with the A/CO, will ensure all awards and sub-awards, include environmental compliance requirements.

5.2.2 During Post-Award:

5.2.2.1 Post-Award Briefings: The A/COR and/or the cognizant environmental officer(s) (e.g., MEO, REA, BEO) will provide post-award briefings for the IP on environmental compliance responsibilities.

5.2.2.3 Workplans and Budgeting: The A/COR will ensure the IP integrates environmental compliance requirements in work plans and budgets to comply with requirements, including EMMP implementation and monitoring.

5.2.2.4 Staffing: The A/COR, in coordination with the IP, will ensure all awards have staffing capacity to implement environmental compliance requirements.

5.2.2.5 Records Management: The A/COR will maintain environmental compliance documents in the official project/activity file and upload records to the designated USAID environmental compliance database system.

5.2.2.6 Host Country Environmental Compliance: The A/COR will ensure the IP complies with applicable and appropriate host country environmental requirements unless otherwise directed in writing by USAID. However, in the case of a conflict between the host country and USAID requirements, the more stringent shall govern.

5.2.2.7 Work Plan Review: The A/COR will ensure the IP verifies, at least annually or when activities are added or modified, that activities remain with the scope of the IEE. Activities outside of the scope of the IEE cannot be implemented until the IEE is amended.

5.2.2.8 IEE Amendment: If new activities are introduced or other changes to the scope of this IEE occur, an IEE Amendment will be required.

5.2.2.9 USAID Monitoring Oversight: The A/COR or designee, with the support of the cognizant environmental officer(s) (e.g., MEO, REA, BEO), will ensure monitoring of compliance with established requirements (e.g., by desktop reviews, site visits, etc.).

5.2.2.10 Environmental Compliance Mitigation and Monitoring Plan: The A/COR will ensure the IP develops, obtains approval for, and implements Environmental Mitigation and Monitoring Plans (EMMPs) that are responsive to the stipulated environmental compliance requirements.

5.2.2.11 Environmental Compliance Reporting: The A/COR will ensure the IP includes environmental compliance in regular project/activity reports, using indicators as appropriate; develops and submits the Environmental Mitigation and Monitoring Reports (EMMRs); and completes and submits a Record of Compliance (RoC) describing their implementation of EMMP requirements in conjunction with the final EMMR or at the close of sub activities (as applicable). And where required by Bureaus or Missions, ensure the IP prepares a closeout plan consistent with contract documentation for A/COR review and approval that outlines responsibilities for end-of-project operation, the transition of other operational responsibilities, and final EMMR with lessons learned.

5.2.2.12 Corrective Action: When noncompliance or unforeseen impacts are identified, IPs notify the A/COR, place a hold on activities, take corrective action, and report on the effectiveness of corrective actions. The A/COR initiates the corrective action process and ensures the IP completes and documents their activities. Where required by Bureaus or Missions, ensure Record of Compliance is completed.

5.3 AGENCY CONDITIONS

5.3.1 Sub-award Screening: The A/COR will ensure the IP uses an adequate environmental screening tool to screen any sub-award applications and to aid in the development of EMMPs.

5.3.2 Programmatic IEEs (PIEE): PIEEs stipulate requirements for additional environmental examination of new or country specific projects/activities. The A/COR of any project/activity being implemented under a PIEE will ensure appropriate reviews are conducted, typically through a Supplemental IEE, and approved by the cognizant BEO.

5.3.3 Supplemental IEEs (SIEEs): An SIEE will be prepared for any new project/activity being planned which fall under a PIEE. The SIEE will provide more thorough analysis of the planned activities, additional geographic context and baseline conditions as well as specific mitigation and monitoring requirements.

5.3.4 Other Supplemental Analyses: The A/COR will ensure supplemental environmental analyses that are called for in the IEE are completed and documented.

5.3.5 Resolution of Deferrals: If a deferral of the environmental threshold determination was issued, the A/COR will ensure that the appropriate 22CFR216 environmental analysis and documentation is completed and approved by the BEO before the subject activities are implemented.

5.3.6 Positive Determination: If a Positive Determination threshold determination was made, the A/COR will ensure a Scoping Statement, and if required an Environmental Assessment (EA), is completed and approved by the BEO before the subject activities are implemented.

5.3.7 Compliance with human subject research requirements: The AM, A/COR shall assure that the IP and sub-awardees, -grantees, and -contractors demonstrate completion of all requirements for ethics review and adequate medical monitoring of human subjects who participate in research trials carried out through this IEE and ensure appropriate records are maintained. All documentation demonstrating completion of required review and approval of human subject trials must be in place prior to initiating any trials and cover the period of performance of the trial as described in the research protocol.

5.4 MITIGATION MEASURES

The mitigation measures created during the development of the EMMP must address, at a minimum, the conditions laid out in Environmental Analysis Section 4 of this IEE. Mitigation measures are to be effective and sufficient to appropriately address the aforementioned conditions. The USAID A/COR and the IP should develop an EMMP in collaboration using the guidance found in USAID's EMMP Factsheet: https://www.usaid.gov/documents/1865/environmental-mitigation-and-monitoring-plan-emmp

6.0 LIMITATIONS OF THIS INITIAL ENVIRONMENTAL EXAMINATION

The determinations recommended in this document apply only to projects/activities and sub-activities described herein. Other projects/ activities that may arise must be documented in either a separate IEE, an IEE amendment if the activities are within the same project/ activity, or other type of environmental compliance document and shall be subject to an environmental analysis within the appropriate documents listed above.

Other than projects/ activities determined to have a Positive Threshold Decision, it is confirmed that the projects/ activities described herein do not involve actions normally having a significant effect on the environment, including those described in 22 CFR 216.2(d).

In addition, other than projects/ activities determined to have a Positive Threshold Decision and/or a pesticide management plan (PERSUAP), it is confirmed that the projects/activities described herein do not involve any actions listed below. Any of the following actions would require additional environmental analyses and environmental determinations:

- Support project preparation, project feasibility studies, or engineering design for activities listed in §216.2(d)(1);
- Affect endangered and threatened species or their critical habitats per §216.5, FAA 118, FAA 119;
- Provide support to extractive industries (e.g. mining and quarrying) per FAA 117;
- Promote timber harvesting per FAA 117 and 118;
- Lead to new construction, reconstruction, rehabilitation, or renovation work per §216.2(b)(1);
- Support agro-processing or industrial enterprises per §216.1(b)(4);
- Provide support for regulatory permitting per §216.1(b)(2);
- Lead to privatization of industrial facilities or infrastructure with heavily polluted property per §216.2(b)(4);
- Procure or use genetically engineered organisms per §216.2(b)(1); and/or
- Assist the procurement (including payment in kind, donations, guarantees of credit) or use (including handling, transport, fuel for transport, storage, mixing, loading, application, clean-up of spray equipment, and disposal) of pesticides or activities involving procurement, transport, use, storage, or disposal of toxic materials. Pesticides cover all insecticides, fungicides, rodenticides, etc. covered under the Federal Insecticide, Fungicide, and Rodenticide Act per §216.2(e) and §216.3(b).

7.0 REVISIONS

Per 22 CFR 216.3(a)(9), when ongoing programs are revised to incorporate a change in scope or nature, an IEE amendment will be prepared to identify and address all environmental impacts. Per ADS 204, it is the responsibility of the USAID A/COR to keep the MEO/REA and BEO informed of any new information or changes in the activity or environmental impacts, requiring revision of this environmental analysis and environmental determination.

ATTACHMENTS:

Annex 1: Drivers and Threats in Ethiopia, as Identified in the 118/119 Analysis

Annex 2: Ongoing Activities also Included in DO3 CRM Analysis

Annex 3: Framework for IEE Compliance and Amendments

Annex 4: Climate Risk Management

Annex 5: EMMP Template

Annex 6: EMMR Template

Annex 7: ERF Template

Annex 8: WQAP Template

ANNEX 1: DRIVERS AND THREATS IN ETHIOPIA, AS IDENTIFIED IN THE 118/119 ANALYSIS

Table[12] below defines the drivers of environmental degradation for each of the direct threats identified. This specification of drivers is based on the overall analysis of threats, stakeholder consultations, and documents reviewed.

Driver	Threat	General Location
Water extraction/diversion with limited regulations or sustainability planning for industrial, agricultural, energy use	• Salinization of irrigated lands • Drying of wetlands • Reduced river baseflow • Impaired water availability/access • Reduced aquifer recharge	Agricultural systems Rift Valley Aquatic systems Highlands Peri-urban areas Cities and villages
Lack of fertile farmland for those seeking farming as a livelihood Associated drivers: • Lack of alternative livelihoods • Youth bulge • Plot fragmentation • Inability to investment in inputs • Poverty • Food insecurity • Low productivity	• Environmental degradation – loss of soil fertility/carbon, loss of biomass • Deforestation/range degradation • Agricultural encroachment • Habitat loss • Burning/fires • Fuelwood gathering/charcoal production	Agricultural systems Highlands Peri-urban areas Protected areas
Inappropriate siting of settlements (refugees, government resettlements, villagization of pastoralists) Associated drivers: • Poor rangeland management • Land clearing • Food insecurity	• Poaching • Habitat loss • Fuelwood gathering/charcoal production • Exploitative forest resource use - cutting, brush clearing • Zoonotic disease • Deforestation/ range degradation • Agricultural encroachment • Overgrazing in sensitive areas • Reduced aquifer recharge	Protected areas Forests Peri-urban areas Pastoralists/lowland areas Highlands

[12] USAID/ETHIOPIA, Tropical Forest and Biodiversity (FAA 118/119) Assessment, December 2016

Rapid population growth (Expansion of peri-urban areas and urbanization) Associated drivers: ● Poverty ● Shoreline alteration ● Food insecurity ● Lack of accessible financial mechanisms for investment and savings ● Lack of business opportunities and alternative livelihoods ● Limited support for small- and medium-sized business, especially green business	● Impaired water availability/access ● Agricultural encroachment ● Deforestation/range degradation ● Improper solid waste management ● Fuelwood gathering/charcoal production ● Exploitative forest resource use - cutting, brush clearing ● Zoonotic disease ● Reduced aquifer recharge ● Air and water pollution	Cities and villages Peri-urban areas Aquatic systems Rift Valley
Industry development/mechanized agriculture in sensitive environments Associated drivers: ● Mono-cropping/non-rotational farming ● Greenfield development ● Industrial air emissions – generators ● Competition over land use ● Shoreline alteration	● Air and water pollution ● Agricultural pesticide and fertilizer run-off ● Loss of soil fertility ● Greenhouse gas emissions ● Reduced aquifer recharge ● Salinization	Rift Valley Highlands Peri-urban areas Agricultural systems
Unsustainable use of pastoralist resources and limitations on alternative livelihoods for pastoralists Associated drivers: ● Poor rangeland management ● Poverty ● Limited modern financing and banking options ● Cultural view of cattle as status, insurance, banking assets ● Food insecurity ● Lack of inclusive management ● Lack of alternative feed/fodder sources or sustainable business around fodder production ● Increase demand for animal proteins	● Overgrazing ● Encroachment/grazing in protected areas ● Environmental degradation – loss of soil fertility/carbon, loss of biomass ● Deforestation/range degradation ● Habitat loss ● Burning/fires ● Invasive species	Pastoralists/lowland areas Protected areas
Climate Change	● Erratic rainfall ● Changing rainfall patterns ● Altered agro-ecological zones ● Inadequate stormwater management	Rift Valley Highlands Pastoralists/lowland areas Aquatic systems Agricultural systems Cities and villages Peri-urban areas

Weak environmental policies/regulation enforcement Associated drivers: ● Too many fishing permits ● No or ineffective ESIA use and monitoring ● Lack of attention to climate risk ● Unmarked boundaries and unenforced regulations in protected areas/sensitive environments ● Weak institutions ● Lack of inclusive management ● Limited baseline data on resources	● Overfishing ● Zoonotic Disease ● Reduced water availability/access and quality ● Land expansion/encroachment ● Deforestation/range degradation ● Air and water pollution ● Agricultural pesticide and fertilizer run-off ● Habitat loss ● Drying/filling of wetlands ● Improper solid waste management	Rift Valley Aquatic systems Highlands Protected areas Agricultural systems Forests
Land tenure disputes and ambiguous land use rights Associated drivers: ● Lack of inclusive management ● Limited baseline data on resources ● Weak institutions	● Encroachment/grazing in protected areas ● Drying/filling of wetlands ● Habitat loss ● Deforestation/range degradation ● Environmental degradation – loss of soil fertility/carbon, loss of biomass	Highlands Protected areas Rift Valley Agricultural systems Forests Pastoralists/lowland areas
Greenhouse gas emissions – burning, charcoaling, fuelwood use, industry, livestock methane Associated drivers: ● Lack of affordable electricity ● Lack of energy options	● Climate change ● Changes in disease distribution / vectors for humans, livestock, crops, and flora and fauna	Rift Valley Cities and villages Peri-urban areas Pastoralists/lowland areas

ANNEX 2: ONGOING ACTIVITIES ALSO INCLUDED IN THE DO3 CRM ANALYSIS

Activity	Description
Project 1: Private Sector Led Economic Transformation	
Sub-activity 1.1 FtF Value Chain	The Feed the Future Ethiopia Value Chain Activity improves the performance of the agriculture sector in Ethiopia. Focusing on six value chains – maize, coffee, chickpea, livestock (i.e. meat and live animals), dairy, and poultry – the activity helps smallholder farmers and agri-businesses by improving agricultural productivity and commercialization. The activity continues its comprehensive approach supporting farmers, cooperatives, private sector traders, agro-processors and input suppliers, as well as financial institutions. With USAID assistance farmers employ good agricultural practices, thereby increasing productivity, and – with greater market connectivity – achieve increased incomes sustainably. With improvements to the dairy, poultry, and chickpea value chains, the activity will increase the accessibility, affordability and variety of nutrient-dense healthy foods, especially amongst women of child-bearing age and children six to 23 months of age. The activity also supports the Government of Ethiopia (GOE) and the private sector to improve the business-enabling environment by improving laws, regulations and policies that affect business and investment opportunities.
Sub-activity 1.2 Growth Through Nutrition (GTN)	GTN aims to reduce maternal and infant mortality by improving the nutritional status of women and young children through sustainable, comprehensive, and coordinated evidence-based interventions. GTN builds upon the GoE's multi-sectoral nutrition program with support from the USG's Global Health and Feed the Future Initiatives. GTN supports the implementation of the National Nutrition Program and the strengthening of multi-sectoral coordination; building capacity at the policy and implementation levels and for pre-service education and training; supporting large-scale behavior change communication for nutrition; linking nutrition, livelihoods and food security interventions; and integrating health and nutrition with private-public partnerships. GTN's innovative interventions, including a robust learning agenda, supports and guides effective nutrition policy and practices to reduce undernutrition. Furthermore, the program contributes to the Agriculture Growth Program as articulated in Ethiopia's Comprehensive African Agriculture Development Plan (CAADP) by strengthening nutrition components.
Sub-activity 1.3 Land Governance Activity	Ethiopia's land tenure system is characterized by government ownership of all land with specific use rights to landholders. The USAID Land Governance activity will assist the Government of Ethiopia (GOE), its regions and citizens to strengthen land governance to increase incomes

	reduce conflict and support well planned urbanization. The activity will facilitate land policy and institutional reforms; improve technical capacity of GOE for suitable land administration and land use planning to address emerging issues, such as urbanization, industrialization, and youth; support policy-oriented research on land governance; expand communal land tenure security in pastoral areas; and develop a scale-able approach for land demarcation and certification in collaboration with community institutions. The activity will include the use of satellite imagery, land surveying and mapping tools, land information systems, research, training and professional services. LGA aims to improve legal and regulatory frameworks for rural land tenure and property rights; strengthen capacity in law, rural land administration, rural land use planning, and conflict resolution; and enhance communal land use rights for pastoral and agro-pastoral communities to improve linkages with value chains, diversify assets and promote improved livelihoods.
Sub-activity 1.4 Partnership for Economic Growth	The activity will undertake economic constraints and complexity analyses which are highly sophisticated methods for determining the principal factors that limit economic growth and identify the best potential reforms and investments that promote economic growth. Both were developed by professors at Harvard University. The university created the Center for International Development (CID) to further its own investigations into the processes of economic growth. Today, the CID is unmatched in its ability to conduct constraints and complexity analyses. While constraints analyses have been done by many consultants as well as by staff from the United States Agency for International Development, none are as qualified to teach the concepts or methods as the members of the CID. Furthermore, there is no other known provider of the combination of the economic complexity and constraints analyses together. CID offers the best training of both. It and it alone has been identified by the Government of Ethiopia as a potential partner in conducting the training and analysis that could lead to a development strategy and specific reform agenda that promotes inclusive economic growth. CID is unique.
Sub-activity 1.5 Hawassa Workers and Community Wellness (Outside the park)	The main tasks under this activity are categorized under three thematic areas: Migrant Worker Support and Community-Led Support Services ▪ Needs assessment of resources and services required by HIP female factory workers; data from the assessment will be used to compile the resources and materials included in the "welcome packs" and the key areas of focus for the "welcome fairs." ▪ Provision of a "welcome pack" addressing the information gaps and initial material needs of newly arrived rural migrants with links and resources for essential services to assist assimilation upon arrival.

	▪ Creation of a "welcome one-pager" to be distributed to labor sourcing centers to ease the concerns of potential employees' transition to the HIP. ▪ Development of "welcome fairs" led by local government ministries and community management committees. ▪ Engagement of local community services and businesses (housing, food purveyors, healthcare, transportation etc.). ▪ Promotion of available community-based resources and skills through in-HIP networks. ▪ Provision of Community Gender Sensitization trainings. Enterprise Trainings and Market Linkages ▪ Viability assessment for establishing markets outside of the HIP, ▪ Organization of single or mixed-gender income generation groups for 3-month business and financial management training led by Plan and local partners. Community Welfare and Safety Solutions Innovation Fund ▪ Development of the fund management structure including community, Plan, PVH, and local government and funding criteria and evaluation milestones. ▪ Open-call for applications for individuals and community groups with a focus on community-led solutions to increase safety for women and workers in the surrounding community. Illustrative solutions could address key safety challenges facing female factory workers such as harassment and gender-based violence (GBV) on the commute to work and predatory accommodation practices. ▪ Community Gender Sensitization Trainings run in parallel to the roll-out.
Sub-activity 1.6 Engineering Services and Construction Oversight	The new Ethiopia Engineering Services and Construction Oversight activity will provide engineering and other technical services to USAID/Ethiopia in design, and oversight of infrastructure and facilities projects implemented under separate mechanisms. Services under this mechanism include conducting analyses and assessments, planning, design, procurement support, quality assurance and construction oversight, commissioning, monitoring and evaluation, capacity building, technical consultancy and general management and administration. The overall objective of this mechanism is to ensure that USAID/Ethiopia constructed infrastructure is safe, functional, and long-lasting so that it is able to generate the development results for which it was intended. With FY 2018 funds, it is anticipated that this mechanism will provide construction oversight and monitoring support for (1) health facility renovation/expansion under Transform Primary Health Care and (2) construction/rehabilitation of water supply systems and latrines in support of WASH activities under Transform WASH, Lowland WASH, and Growth thru Nutrition.
Sub-activity 1.7	The activity will create a three-year partnership between the Government of Ethiopia, the Growth Lab at the Center of International Development at Harvard University, and USAID to identify what is impeding private sector-

Advancing Economic Diversification in Ethiopia	led economic growth and diversification. It will rely on economic diagnostic tools that analyze the Ethiopian economy at national and regional levels in order to highlight viable policy reforms and investments. The Growth Lab team will make policy recommendations to the GoE based on the results of the analyses. In addition, the Growth Lab will provide policy design, analysis, and accompaniment services to the GoE and relevant development partners as they implement the reforms. The Growth Lab will help the GoE improve the way their ministerial teams work, train officials in new methods and tools to achieve goals, and help the GOE to keep the public informed about the nature and the need of the reforms and the progress being made in implementing them.
Sub-activity 1.8 Ethiopian Strategy Support Program (ESSP)	The Ethiopian Strategy Support Program (ESSP) is a collaborative effort between the International Food Policy Research Institute (IFPRI) and the Ethiopian Development Research Institute (EDRI) and receives funding from a consortium of donors, including USAID, DFID and the EU. The core purpose of ESSP is to enhance the national capacity for evidence-based policies for pro-poor growth through three core program objectives: generate applied policy research to fill key knowledge gaps to strengthen the design and implementation of Ethiopia's agriculture and food security development strategy; strengthen the capacity of Ethiopian policy research institutions; and, build a stronger and more integrated knowledge support system within the country to underpin future investments. With FY 2019 resources, ESSP will conduct capacity building and outreach and provide evidence-based research to support economic transformation in Ethiopia. Research will directly link to USAID/Ethiopia's new CDCS and GFSS policy priority areas.
Sub activity 1.9 Feed the Future Ethiopia Advanced Maize Seed Adoption Program (AMSAP)	AMSAP is a GDA that ran for 5 years in partnership with DuPont Pioneer/Corteva, the ATA (Ethiopia's Agriculture Transformation Agency), the Government of Ethiopia, represented by the Ministry of Agriculture (MoA) and USAID, represented by our implementing partner ACDI/VOCA. The AMSAP partnership with Corteva aimed at shifting Ethiopian smallholder farmers from using low productivity, open pollinated maize seed varieties to the application of high yielding hybrid seed varieties there by, raising productivity and smallholders' incomes. In its course of implementation, in the four major regions of the country; Amhara, Tigray, Oromia and SNNPR, AMSAP surpassed its LOP target of reaching 27 woredas and 100,000 smallholder farmers by reaching 53 woredas and around 300,000 smallholder farmers.

ANNEX 3. FRAMEWORK FOR IEE COMPLIANCE AND AMENDMENTS

The USAID/Ethiopia Development Objective 3 combines central- and Mission-funded new and ongoing activities, which are integrated under a single DO. However, the analysis of reasonably foreseeable effects is currently spread across this as well as numerous other IEEs with different conditions, as noted in the table below, which adds challenges for the Mission in deciding how and when to amend and apply IEEs.

As a resource for A/CORs and MEO, the framework provided here documents the ongoing conditions for both Mission-funded and centrally-managed activities as well as the means for amendment or extension of expiring IEEs.

DO3 ENVIRONMENTAL COMPLIANCE ROADMAP

Funding Type and Implementation Status	IEE Coverage and Instructions for Use or Amendment
Mission-funded New or Planned Projects/Activities	1. Comply with all conditions/mitigation measures in this IEE DO3 Inclusive Economic Growth IEE https://ecd.usaid.gov/document.php?doc_id=52519
Mission-funded Ongoing Projects/Activities with Valid IEE	1. Comply with all conditions/mitigation measures in the IEEs below. IEE: USAID/Ethiopia Agriculture Value Chain and Private Sector Project https://ecd.usaid.gov/repository/pdf/43851.pdf IEE: USAID/Ethiopia Increased Growth with Resiliency in Rural Ethiopia Development Objective https://ecd.usaid.gov/repository/pdf/44776.pdf IEE Ame#1: USAID/Ethiopia Increased Growth with Resiliency in Rural Ethiopia Development Objective https://ecd.usaid.gov/repository/pdf/45921.pdf IEE: Alliance for Improved and Nutritious Food Processing (AINFP) - GDA Cooperative Agreement https://ecd.usaid.gov/repository/pdf/50427.pdf IEE: Agricultural Insurance Development Program https://ecd.usaid.gov/repository/pdf/52222.pdf IEE: Partnership for Economic Growth https://ecd.usaid.gov/repository/pdf/51863.pdf OR other applicable IEE as documented in Mission records 2. Reevaluate existing Environmental Mitigation and Monitoring Plan (EMMP) annually but continue to operate under guiding conditions of the valid IEE identified in the award/contract
Mission-funded Ongoing Projects/Activities with an Expiring IEE	If and when ongoing DO3 activities have an expiring IEE, the Mission may: 1. Draft an amendment to the expiring IEE, in consultation with the AFR BEO. 2. Amend this DO3 Inclusive Economic Growth IEE to include the activity by: o Conducting a full analysis of the ongoing activity (description, environmental impact, associated conditions/mitigation measures) o Comply with the Agency and BEO Specific Conditions of

Funding Type and Implementation Status	IEE Coverage and Instructions for Use or Amendment
	this IEE. o Require the Implementing Partner to reevaluate existing EMMP or draft a new EMMP to comply with the conditions of the DO3 Inclusive Economic Growth IEE and its Amendment.
Central-funded New or Planned	Refer/coordinate with Washington Funding Entity
Central-funded Ongoing	1. Centrally-funded or managed project/activities which are integrated into DO3 should continue to follow the conditions established in the IEEs or environmental documentation noted in their awards/contracts.
Central-funded with Expiring IEE	Consult with the appropriate lead BEO

ANNEX 4: CLIMATE RISK MANAGEMENT (see attached annex)

ANNEX 5: ENVIRONMENTAL MITIGATION AND MONITORING PLAN (EMMP) TEMPLATE

PROJECT/ACTIVITY DATA

Project/Activity Name:	
Geographic Location(s) (Country/Region)**:**	
Implementation Start/End Dates:	
Contract/Award Number:	
Implementing Partner(s):	
Tracking ID:	
Tracking ID/link of Related IEE:	
Tracking ID/link of Other, Related Analyses:	

ORGANIZATIONAL/ADMINISTRATIVE DATA

Implementing Operating Unit(s): (e.g. Mission or Bureau or Office)	
Lead BEO Bureau:	
Prepared by:	
Date Prepared:	
Submitted by:	
Date Submitted:	

ENVIRONMENTAL COMPLIANCE REVIEW DATA

Analysis Type:	EMMP
Additional Analyses/Reporting Required:	EMMR [*Add others as appropriate*]

PURPOSE

This template is modified from the standard USAID Agency Environmental Mitigation and Monitoring Plan (EMMP) template in that this EMMP requires more detailed narrative of environmental impacts, carry over of specific BEO conditions, and clearances by the A/COR and MEO with availability of this document to the REA and the BEO on the USAID shared Google Folder:
https://drive.google.com/drive/u/0/folders/11havIAxH08vgaiUtmpGXpv2I-xnRWSNK.

EMMPs are required for USAID-funded projects when the 22CFR216 documentation governing the project (e.g. the Initial Environmental Examination (IEE)) imposes mitigation measures on at least one project or activity. EMMPs ensure that the ADS 204 requirements for incorporating and monitoring appropriate mitigative measures into project or activity design. Responsibility for developing the EMMP lies with USAID, but EMMPs are usually prepared by the Implementing Partner (IP). EMMPs are typically

conducted after the IEE is complete, though they may be completed as part of the IEE. EMMPs are a vehicle for translating applicable IEE conditions and mitigation measures into specific, implementable, and verifiable actions.

An EMMP is an action plan that clearly defines:

1. **Mitigation measures.** Actions that reduce or eliminate potential negative environmental impacts resulting directly or indirectly from a particular project or activity, including environmental limiting factors that constrain development.

2. **Monitoring indicators.**[13] Criteria that demonstrate whether mitigation measures are suitable and implemented effectively.

3. **Monitoring/reporting frequency.** Timeframes for appropriately monitoring the effectiveness of each specific action.

4. **Responsible parties.** Appropriate, knowledgeable positions assigned to each specific action.

USAID APPROVAL OF EMMP

[***The routing process and associated signature blocks may be customized by Bureau or Mission. Please follow Bureau- or Mission-specific guidance****. Include signature blocks in accordance with Bureau and/or Mission policy. At a minimum include the noted required signatures. Add other signatures as necessary.*]

Approval:	[NAME], Activity Manager/A/COR [***required***]	Date
Clearance:	[NAME], Mission Environmental Officer [***as appropriate***]	Date
Clearance:	[NAME], Regional Environmental Advisor [***as appropriate***]	Date
Concurrence:	[NAME], _____ Bureau Environmental Officer [***as appropriate***]	Date

DISTRIBUTION: [*Distribution lists may be customized by Bureau or Mission. Please follow Bureau- or Mission-specific guidance.*]

[13] Note: Monitoring indicators differ from performance indicators, which are the measures that USAID uses to detect progress towards the results included in a Results Framework.

1.0 PROJECT/ACTIVITY SUMMARY

[*This should be a concise summary of information in the IEE, modified to site-specific circumstances, with regard to mitigation and monitoring activities.]*

1.1 GENERAL ACTIVITY SUMMARY

[Provide a description of the overall activity including locations of the activity and the environmental setting associated with the activity.]

1.2 CONDITIONS ASSOCIATED WITH THE ACTIVITY

[Copy from the IEE Table 4, the associated conditions of this activity.]

1.3 DESCRIPTION OF SUB-ACTIVITIES

[Provide in detail the actions associated with this activity.]

2.0 ENVIRONMENTAL SETTING AND IMPACTS

2.1 ENVIRONMENTAL SETTING

[Provide details about:

- where actions will take place
- identify any locations of special consideration such as parks or Ramsar sites
- other details which may improve the understanding of the environmental impacts]

2.2 ENVIRONMENTAL IMPACTS

[In narrative, conduct an analysis of environmental impacts associated the sub-activities described in Section 1.3 including potential indirect and cumulative impacts assocated with the sub-activities.]

3.0 EMMP TABLE FOR [PROVIDE NAME OF ACTIVITY]

[*Modify activity categories as appropriate.*]

Project/Activity/Sub-Activity	**Identified Environmental Aspects or Impacts**	**Mitigation Measure(s)** Include: Responsible party, timing of mitigation with the project life cycle.	**Monitoring Indicator(s)**	**Monitoring and Reporting Frequency**	**Responsible Parties**
Sub-Activity Category 1:					
Sub-Activity Category 2:					
Sub-Activity Category 3:					
Sub-Activity Category 4:					
Sub-Activity Category 5:					
Sub-Activity Category 6:					
Add rows as needed					

ANNEX 6: EMMR TEMPLATE

EMMR TEMPLATE INSTRUCTIONS

(These are template instructions; please delete this page as you finalize this document).

Background:
This standardized template is part of a broader initiative to harmonize application of 22 CFR 216 across USAID. It also serves as an important step towards moving to an online Environmental Compliance System (ECS) which will be integrated with the Development Information System (DIS).

This template is used for:

1. This template is for the Environmental Mitigation and Monitoring Report, prepared for any project/activity for which the Initial Environmental Examination or Environmental Assessment specified development of an EMMP and subsequently an EMMR. EMMRs are used to report on the status of mitigation and monitoring efforts in accordance with IEE requirements over the preceding project implementation period. The EMMR should be prepared (minimally) annually.

How to use this template:

1. The first page is standard metadata utilized in the ECD and planned DIS system, please do not alter the fields. Enter as much of the information as is known at the time of drafting.
2. **On subsequent pages, there are embedded (screen tips) instructions to assist the writer.** To see the instructions, hover over the red underlined text. The embedded instructions are intended to streamline the paper template and to simulate the online system. Please ignore reference to "Control+Click to follow link" within the screen tips.
3. All **headings and existing text** are standard. Please refrain for editing.
4. **Yellow highlighted text** may be updated and/or deleted as appropriate. Please remove all yellow highlighting as you finalize the document.
5. **Be sure no PII information is contained within the document** prior to submitting for BEO approval.
6. **Delete this page as you finalize this document**.

Reminder: Mission Environmental Officers, Regional Environmental Officers, and Bureau Environmental Officers are resources for USAID staff developing projects and compliance documents. Please engage them early and often. Additional guidance and help is also available at https://www.usaid.gov/environmental-procedures.

USAID's Environmental Compliance Database of approved 22 CFR 216 documentation provides examples of approved RCEs and other environmental compliance documents, which may assist with language for similar projects.

Revision Date: March 2019
Version: 3.0

Responsible Office: E3/AA

ENVIRONMENTAL MITIGATION AND MONITORING REPORT (EMMR)

PROJECT/ACTIVITY DATA

Project/Activity Name:	
Geographic Location(s) (Country/Region)**:**	
Implementation Start/End Dates:	
Contract/Award Number:	
Implementing Partner(s):	
Tracking ID:	
Tracking ID/link of Related IEE:	
Tracking ID/link of Other, Related Analyses:	

ORGANIZATIONAL/ADMINISTRATIVE DATA

Implementing Operating Unit(s): (e.g. Mission or Bureau or Office)	
Lead BEO Bureau:	
Prepared by:	
Date Prepared:	
Submitted by:	
Date Submitted:	

ENVIRONMENTAL COMPLIANCE REVIEW DATA

Analysis Type:	EMMR
Additional Analyses/Reporting Required:	

PURPOSE

Environmental Mitigation and Monitoring Report (EMMRs) are required for USAID-funded projects when the 22CFR216 documentation governing the project impose conditions on at least one project/activity component. EMMRs ensure that the ADS 204 requirements for reporting on environmental compliance are met. EMMRs are used to report on the status of mitigation and monitoring efforts in accordance with IEE requirements over the preceding project implementation period. They are typically provided annually, but the frequency will be stipulated in the IEE or award document.

Generally, EMMRs are developed by the IP (and updated at least annually) in conjunction with the Annual Report. Responsibility for ensuring IPs submit appropriate EMMRs rest with USAID CORs/AORs. These reports are an important tool in adaptive management and are used by Mission, Regional, and Bureau Environmental officers to ensure USAID interventions are implemented in compliance with 22 CFR 216 and mitigation measures are adequate.

SCOPE

The following EMMR documents the status of each required mitigation measure as stipulated in the associated EMMP. It provides a succinct update on progress regarding the implementation and monitoring of mitigation measures implemented as detailed in the EMMP. It summarizes field monitoring, issues encountered, actions taken to resolve identified issues, outstanding issues, and lessons learned.

This EMMR includes the following:

1. A succinct narrative description of the EMMP implementation and monitoring system, any updates to the system, any staff or beneficiary trainings conducted on environmental compliance, lessons learned, and other environmental compliance reporting details.

2. EMMR table summarizing the status of mitigation measures, any outstanding issues relating to required conditions, and general remarks.

3. Attachments such as photos of mitigation measures and activities, waste disposal logs, water quality data, etc.

USAID REVIEW OF EMMR

Approval:	[NAME], Activity Manager/A/COR [required]	Date
Clearance:	[NAME], Mission Environmental Officer [as appropriate]	Date
Clearance:	[NAME], Regional Environmental Advisor [as appropriate]	Date
Concurrence:	[NAME], _____ Bureau Environmental Officer [as required]	Date

DISTRIBUTION:

1.0 PROJECT/ACTIVITY SUMMARY

2.0 ENVIRONMENTAL COMPLIANCE MONITORING AND REPORTING

3.0 LESSONS LEARNED

4.0 EMMR TABLE FOR [PROVIDE NAME OF ACTIVITY]

[*Period Covered*]

Project/Activity/Sub-Activity	**Mitigation Measure(s)**	**Summary Field Monitoring/Issues/Resolution** (i.e. monitoring dates, observations, issues identified and resolved)	**Outstanding Issues, proposed resolutions**
Activity 1:			
Activity 2:			
Activity 3:			
Activity 4:			
Activity 5:			
Activity 6:			
Add rows as needed			

ADDITIONAL COMMENTS

Add comments as needed

5.0 ATTACHMENTS

USAID REVIEW OF EMMR

Approval:	[NAME], Activity Manager/A/COR [***required***]	Date
Clearance:	[NAME], Mission Environmental Officer [***as appropriate***]	Date
Clearance:	[NAME], Regional Environmental Advisor [***as appropriate***]	Date
Concurrence:	[NAME], _____ Bureau Environmental Officer [***as appropriate***]	Date

DISTRIBUTION:

ANNEX 7: Environmental Review Form (ERF) for sub-projects/activities

NOTE TO USAID STAFF, CONSULTANTS & PARTNERS REGARDING THE:

AFRICA BUREAU ENVIRONMENTAL REVIEW FORM & INSTRUCTIONS

APPROPRIATE USE

1. The Environmental Review Form (ERF) can only be used when and as specifically authorized by the IEE or EA governing the project or program in question. For IEEs, this authorization is made in the form of a negative determination with conditions. *Authorized use of the ERF is limited to the specific class of activities enumerated in the determination.*

2. The BEO will not clear an IEE or EA that authorizes use of the ERF unless ALL of the following are true:

a. **the general nature or potential scope of the activities for which the ERF will be used are known** at the time the IEE is written (e.g. small infrastructure rehabilitation, training and outreach for a specified purpose, etc.).

b. **these activities will be executed under a grant or subproject component of a parent project/program.** The ERF cannot be used in lieu of a request for categorical exclusion, IEE or IEE amendment when new activities/components are to be added to existing projects, programs or sector portfolios.

c. of their general nature, **foreseeable adverse environmental impacts are small or easily controllable with BASIC MITIGATION TECHNIQUES that can BE SUCCESSFULLY IMPLEMEMENTED BY FIELD STAFF.**

d. of their general nature, the **activities are NOT large-scale.**

There is no formal AFR standard for "small-scale activities." Over time, AFR has developed some "rules of thumb" for activities that are BOTH small-scale AND pose very low risks of significant adverse impacts. These are used in the ERF itself: e.g. construction involving less than 10,000 sq. ft total disturbed area and less than $200,000 total cost; road rehabilitation of less than 10km total length without change to alignment or right-of-way. Activities moderately larger than these "rules of thumb" are also small-scale, but are treated by the ERF as being of moderate/unknown risk, thus requiring an environmental review report.

What does "moderately larger" mean? What about activities for which there is no "rule of thumb" built into the ERF? Absolute physical scale and funding level, physical scale relative to the surrounding built environment, population affected, and number of locations affected are among the factors relevant to determining whether a class of activities is "small scale." The IEE must provide enough information for the BEO to assess whether the activities proposed for subproject review will be indeed be small scale within their implementation context.

ADAPTATION OF THE FORM

1. Text in **UNDERLINE & BLUE HIGHLIGHT MUST** be customized to the particular project/mission.
2. Yellow highlighted text must be reviewed and then modified, deleted or retained, as appropriate.
3. Both the form AND instructions should be generally reviewed and modified to reflect the specific project/program and implementation context.
4. The adapted form and instructions must be appended to the Initial Environmental Examination for the overall project.
5. For NRM-oriented programs (especially those involving CBNRM, ecotourism, enterprises exploiting non-timber forest products, etc.) consider adaptation and use of the Supplemental Environmental Review Form for NRM sector activities.

QUESTIONS AND GUIDANCE

General guidance on subproject review is available on the MEO Resource Center at www.encapafrica.org/meoEntry.htm. For specific questions, contact the Mission Environmental Officer or Regional Environmental Advisor. Good-practice examples of completed

forms, environmental review reports and environmental management plans are available from USAID/AFR's ENCAP project: encapinfo@cadmusgroup.com; www.encapafrica.org.

REVISION HISTORY:

Major update on 24 June 2010 to clarify appropriate use, revise Env Review Report structure, and update clearance requirements. Formatting and presentation revised 17 Jan 2005. Revised April 13, 2004, to include biosafety considerations and better reflect the Supplemental Environmental Review Form for NRM sector activities.

DELETE THIS PAGE BEFORE DISTRIBUTING THIS FORM

INSTRUCTIONS FOR ENVIRONMENTAL REVIEW OF XXX PROGRAM SUBPROJECTS/SUB-GRANTS

Note: *These instructions accompany the attached "Environmental Review Form for USAID/XXX Program/Project Activities" (ERF).* ***Follow, but DO NOT SUBMIT, these instructions.***

WHO MUST SUBMIT THE ENVIRONMENTAL REVIEW FORM (ERF)?

ALL Implementing Partners seeking to implement [describe qualifying activities] under the XXX Program/Project must complete, sign and submit the ERF to [insert name & email of C/AOTR].

Authority: Use of the ERF for these activities is mandated by the governing Initial Environmental Examination (IEE) for the XXX Project/Program. The IEE can be downloaded at: *[insert URL].*

NO IMPLEMENTATION WITHOUT AN APPROVED ERF

The proposed activities cannot be implemented and no "irreversible commitment of resources" for these activities can be made until the ERF (including Environmental Review Report, if required, see Step 4, below) is cleared by the C/AOTR, the Mission Environmental Officer (MEO) and the Regional Environmental Advisor (REA).

NOTE: USAID may deny clearance to the ERF, or may require modification and re-submission for clearance.

ENVIRONMENTAL MANAGEMENT REQUIREMENTS RESULTING FROM THE ERF

If the ERF requires preparation of an Environmental Review Report (see Step 4, below), any environmental management measures specified in the approved Environmental Review Report MUST be implemented.

SITUATIONS IN WHICH ADDITIONAL ENVIRONMENTAL REVIEW IS REQUIRED.

If the ERF finds that one of more of the proposed activities has the potential to cause significant adverse environmental impacts, the activities must be redesigned or an IEE or full Environmental Assessment must be conducted and approved prior to implementation.

If USAID determines that the proposed activities are outside the scope of activities for which use of this form is authorized, the activities must be redesigned or an IEE or IEE Amendment will be required.

In either situation, USAID will confer with the partner to determine next steps. Note: If an IEE or EA is required, all environmental management measures specified in the IEE or EA must then be implemented.

STEP 1. PROVIDE REQUESTED "APPLICANT INFORMATION" (SECTION A OF THE ERF)

STEP 2. LIST ALL PROPOSED ACTIVITIES

In Section B of the form, list all proposed activities.

Activities are a desired accomplishment or output: e.g. seedling production, road rehabilitation, school construction. Each activities has entailed *actions*—for example, road rehabilitation includes survey, grading, culvert construction, compaction, etc. *Be aware of these entailed actions, but do NOT list them.*

List activities DESCRIPTIVELY. For example, "training" is not a sufficient activity listing. The listing must specify WHO is being trained, and in WHAT.

STEP 3A. SCREENING: IDENTIFY LOW-RISK AND HIGH-RISK ACTIVITIES

For *each* activity you have listed in Section B of the form, refer to the list below to determine whether it is a listed low-risk or high-risk activity.

If an activity is specifically identified as "very low risk" or "high risk" in the list below, indicate this in the "screening result" column in Section B of the form.

Very low-risk activities (Activities with low potential for adverse biophysical or health impacts; including §216.2(c)(2))	**High-risk activities** (Activities with high potential for adverse biophysical or health impacts; including §216.2(d)(1))
Provision of education, technical assistance, or training. (Note that activities directly affecting the environment. do not qualify.) **Community awareness** initiatives. **Controlled agricultural experimentation** exclusively for the purpose of research and field evaluation confined to small areas (normally under 4 ha./10 acres). This must be carefully monitored and no protected or other sensitive environmental areas may be affected). **Technical studies and analyses** and other information generation activities not involving intrusive sampling of endangered species or critical habitats. **Document or information transfers**. **Nutrition, health care or family planning**, EXCEPT when (a) some included activities could directly affect the environment (construction, water supply systems, etc.) or (b) biohazardous (esp. HIV/AIDS) waste is handled or blood is tested. **Small-scale construction.** Construction or repair of facilities if total surface area to be disturbed is under 10,000 sq. ft. (approx. 1,000 sq. m.) (and when no protected or other sensitive environmental areas could be affected). **Intermediate credit.** Support for intermediate credit arrangements (when no significant biophysical environmental impact can reasonably be expected). **Maternal and child feeding** conducted under Title II of Public Law 480. **Title II Activities.** Food for development programs under Title III of P.L. 480, when no on-the-ground biophysical interventions are likely. **Capacity for development.** Studies or programs intended to develop the capability of recipients to engage in development planning. (Does NOT include activities directly affecting the environment) **Small-scale Natural Resource Management activities** for which the answer to ALL SUPPLEMENTAL SCREENING QUESTIONS (see *Natural Resources supplement*) is "NO."	**River basin development** **New lands development** **Planned resettlement** of human populations. **Penetration road building, or rehabilitation** of roads (primary, secondary, some tertiary) over 10 km length, and any roads which may pass through or near relatively undegraded forest lands or other sensitive ecological areas **Substantial piped water supply and sewerage** construction. **Major bore hole or water point construction.** **Large-scale irrigation; Water management structures** such as dams and impoundments **Drainage of wetlands** or other permanently flooded areas. **Large-scale agricultural mechanization.** **Agricultural land leveling.** **Procurement or use of restricted use pesticides**, or wide-area application in non-emergency conditions under non-supervised conditions. (Consult MEO.) **Light industrial plant production or processing** (e.g., sawmill operation, agro-industrial processing of forestry products, tanneries, cloth-dying operations). **High-risk and typically not funded by USAID:** **Actions affecting protected areas and species.** Actions determined likely to significantly degrade protected areas, such as introduction of exotic plants or animals. Actions determined likely to jeopardize threatened & endangered species or adversely modify their habitat (esp. wetlands, tropical forests) **Activities in forests, including:** ▪ **Conversion of forest lands** to rearing of livestock ▪ **Planned colonization of forest** lands ▪ **Procurement or use of timber harvesting equipment** ▪ **Commercial extraction of timber** ▪ **Construction of dams** or other water control structures that flood relatively undegraded forest lands ▪ **Construction, upgrading or maintenance of roads** that pass through relatively non-degraded forest lands. (Includes temporary haul roads for logging or other extractive industries)

(This list of activities is taken from the text of 22 CFR 216 and other applicable laws, regulations and directives)

STEP 3B: IDENTIFYING ACTIVITIES OF UNKNOWN OR MODERATE RISK.

All activities NOT identified as "very low risk" or "very high risk" are considered to be of "unknown or moderate risk." Common examples of moderate-risk activities are given in the table below.

Check "moderate or unknown risk" under screening results in Section B of the form for ALL such activities.

Common examples of moderate-risk activities

CAUTION:
If ANY of the activities listed in this table may adversely impact (1) protected areas, (2) other sensitive environmental areas, or (3) threatened and endangered species and their habitat, THEY ARE NOT MODERATE RISK. All such activities are HIGH RISK ACTIVITIES.

Small-scale agriculture, NRM, sanitation, etc. (You may wish to define what "small scale" means for each activity)

Agricultural experimentation. Controlled and carefully monitored agricultural experimentation exclusively for the purpose of research and field evaluation of MORE than 4 ha.

> **NOTE Biotechnology/GMOs:** No *biotechnology testing or release* of any kind are to take place within an assisted country until the host countries involved have drafted and *approved* a regulatory framework governing biotechnology and biosafety.
>
> All USAID-funded interventions which involve biotechnologies are to be informed by the ADS 211 series governing "Biosafety Procedures for Genetic Engineering Research". In particular this guidance details the required written approval procedures needed before transferring or releasing GE products to the field.

Medium-scale construction. Construction or rehabilitation of facilities or structures in which the surface area to be disturbed exceeds 10,000 sq. ft (1000 sq. meters) but funding level is $200,000 or less. (E.g. small warehouses, farm packing sheds, agricultural trading posts, produce market centers, and community training centers.)

Rural roads. Construction or rehabilitation of rural roads meeting the following criteria:

- Length of road work is less than ~10 km
- No change in alignment or right of way
- Ecologically sensitive areas are at least 100 m away from the road and not affected by construction or changes in drainage.
- No protected areas or relatively undegraded forest are within 5 km of the road.

Title II & III Small-Scale Infrastructure. Food for Development programs under Title II or III, involving small-scale infrastructure with the known potential to cause environmental harm (e.g., roads, bore holes).

Quantity imports of commodities such as fertilizers

Sampling. Technical studies and analyses or similar activities that could involve intrusive sampling, of endangered species or critical habitats. (Includes aerial sampling.)

Water provision/storage. Construction or rehabilitation of small-scale water points or water storage devices for domestic or non-domestic use. Water points must be located where no protected or other sensitive environmental areas could be affected.

> **NOTE**: USAID guidance on water quality requires testing for arsenic, nitrates, nitrites and coliform bacteria.

Support for intermediate credit institutions when indirect environmental harm conceivably could result.

Institutional support grants to NGOs/PVOs when the activities of the organizations are known and may reasonably have adverse environmental impact.

Pesticides. . Small-scale use of USEPA-registered, least-toxic general-use pesticides. Use must be limited to NGO-supervised use by farmers, demonstration, training and education, or emergency assistance.

> **NOTE**: Environmental review (see step 5) must be carried out consistent with USAID Pesticide Procedures as required in Reg. 16 [22 CFR 216.3(b)(1)].

Nutrition, health care or family planning, if (a) some included activities could directly affect the environment (e.g., construction, supply systems, etc.) or (b) biohazardous healthcare waste (esp. HIV/AIDS) is produced, syringes are used, or blood is tested.

STEP 4. DETERMINE IF YOU MUST WRITE AN ENVIRONMENTAL REVIEW REPORT

Examine the "screening results" as you have entered them in Table 1 of the form.

i. If ALL the activities are "very low risk," then no further review is necessary. In Section C of the form, check the box labeled "very low risk activities." Skip to Step 8 of these instructions.

ii. If ANY activities are "unknown or moderate risk," you MUST complete an ENVIRONMENTAL REVIEW REPORT addressing these activities. Proceed to Step 5.

iii. If ANY activities are "high risk," note that USAID's regulations usually require a full environmental assessment study (EA). Because these activities are assumed to have a high probability of causing significant,

adverse environmental impacts, they are closely scrutinized. *Any* proposed high-risk activity should be discussed in advance with USAID. Activity re-design is often indicated.

In some cases, it is possible that reasonable, achievable mitigation and monitoring can reduce or eliminate likely impacts so that a full EA will not be required. If the applicant believes this to be the case, the Environmental Review Report must argue this case clearly and thoroughly. Proceed to Step 5.

STEP 5. WRITE THE ENVIRONMENTAL REVIEW REPORT, IF REQUIRED

The Environmental Review Report presents the environmental issues associated with the proposed activities. It also documents mitigation and monitoring commitments. Its purpose is to allow the applicant and USAID to evaluate the likely environmental impacts of the project.

For a single, moderate risk activity, the Environmental Review Report is typically a SHORT 4–5 page document. The Report will typically be longer for (1) multiple activities; (2) activities of high or unknown risk; and/or (3) when a number of impacts and mitigation measures are being identified and discussed.

The Environmental Review Report follows the outline below. Alternate outlines are acceptable, so long as all required information is covered.

A. **Summary of Proposal.** Very briefly summarize background, rationale and outputs/results expected. (Reference proposal, if appropriate).

B. **Description of Activities.** For all moderate and high-risk activities listed in Section B of the ERF, succinctly describe location, siting, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during all project phases and who will undertake them. (All of this information can be provided in a table). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these.

C. **Site-specific Environmental Situation & Host Country Requirements.** Describe the environmental characteristics of the site(s) where the proposed activities will take place. Focus on site characteristics of concern—e.g., water supplies, animal habitat, steep slopes, etc. With regard to these critical characteristics, is the environmental situation at the site degrading, improving, or stable?

Also note applicable host country environmental regulations and/or policies. (For example, does the project require host country environmental review or permitting? Building approval? Etc.)

NOTE: provide site-specific information in this section, NOT country-level information. General information about country level conditions should already be contained in the IEE governing the XXX project/program.

D. Environmental Issues, Mitigation Actions, and Findings. For ALL proposed activities

i. Briefly note the potential environmental impacts or concerns presented by the proposed activities (if any). *For guidance, refer to Africa Bureau's Environmental Guidelines for Small-Scale Activities; available at www.encapafrica.org/egssaa.htm*.

As per the *Small-Scale Guidelines*, consider direct, indirect and cumulative impacts across the activity lifecycle (i.e. impacts of site selection, construction, and operation, as well as any problems that might arise with abandoning, restoring or reusing the site at the end of the anticipated life of the facility or

activity). Note that "environment" includes air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archaeological or other cultural resources, people and their communities, land use, traffic, waste disposal, water supply, energy, etc.)

ii. Assess the extent to which these *potential* impacts and concerns are significant in the context of the specific activity design and site.

iii. Set out the mitigation actions to be employed to address these issues.

Mitigation actions are means taken to avoid, reduce or compensate for impacts. Mitigation measures must be reasonable and implementable by field staff. They should be consistent with the good practice guidance provided in Africa Bureau's Environmental Guidelines for Small-Scale Activities; (www.encapafrica.org/egssaa.htm.) Cite this or other guidance used for mitigation design.

iv. Reach one of three findings regarding the potential impacts:

a. Significant adverse impacts are very unlikely. Of its nature, the activity in question is very unlikely to result in significant, adverse environmental impacts. Special mitigation or monitoring is not required.
Note: this conclusion is rarely appropriate for high-risk activities.

b. With implementation of the specified mitigation and monitoring, significant adverse impacts are very unlikely.

c. Significant adverse impacts are possible. That is, it is not possible to rule out significant adverse environmental impacts even given reasonable, attainable mitigation and monitoring.

In this case, USAID and the partner will consult regarding next steps. If the activity is to go forward in its current form, additional analysis in the form of an IEE or EA will be required.

Format and structure of this section. Choose a format and structure that presents the necessary information clearly and succinctly.

Table formats can be used. In the example below, the proposed activity was construction of an institutional facility on a 7500m3 plot bisected by a seasonal stream providing drainage to the local area. One potential impact of the activity was reduction of or alteration to the drainage eco-service provided by the seasonal stream.

Issue or cause for concern	Analysis	Finding and conditions/mitigation actions
The seasonal stream running through the plot drains an area of at least 2 km^2 to the WNW. Diminution or alteration to this drainage "service" could result in increased upstream pooling & flooding during the rainy season, with associated property damage and increased breeding	As indicated at left, this impact only arises if the drainage "service " provided by the seasonal stream is diminished or altered in some adverse manner. So long as compound design maintains the existing service level and construction is managed without disruption to stream flow, actual	Per analysis at left, this potential impact is not significant, so long as the following mitigations are implemented: 1. Total stream capacity cannot be diminished by the development of the compound. (Stream channel on average is 3m x 1m.) 2. The stream must remain substantially in the same channel and cannot, e.g., be re-routed around the property. 3. If construction will result in an interruption to stream flow, provision must be made to provide a temporary bypass. Temporary damming of stream flow is not permissible.

habitat for disease vectors.	adverse impact will be negligible or zero.	4. Post-construction, the stream bed within the property, including point-of-entry (e.g. via culvert under perimeter wall) must be maintained free of obstructions to flow.

E. Environmental Mitigation and Monitoring Plan (EMMP). Set out how compliance with mitigation actions will be monitored/verified. This includes specifying WHO will be responsible for the various mitigation actions, and HOW implementation of the mitigation actions will be tracked/verified.

Also specify how you will report to USAID on the implementation of mitigation actions. (You are REQUIRED to provide your C/AOTR with sufficient information on the status of mitigation implementation for USAID to effectively fulfill its oversight and performance monitoring role.)

Again, choose a format and structure that presents the necessary information clearly and succinctly. EMMPs are typically in table format, and often include a compliance log or "monitoring record" section that records implementation status of the various mitigation actions. The EMMP with current monitoring log can then simply be submitted to the C/AOTR with the quarterly or 6-month project report, satisfying the environmental compliance reporting requirement. .

The most basic EMMP format is

Mitigation action	Responsible Party	Monitoring/Verification Method	Monitoring Record (date, result, corrective actions taken, if any)

For additional EMMP formats and examples, see the ENCAP EMMP factsheet, available via www.encapafrica.org/meoEntry.htm

F. **Other Information**. Where possible and as appropriate, include photos of the site and surroundings; maps; and list the names of any reference materials or individuals consulted.

(Pictures and maps of the site can substantially reduce the written description required in parts B & C)

STEP 6. TRANSCRIBE FINDINGS FROM THE ENVIRONMENTAL REVIEW REPORT TO THE ERF

For each high-risk or unknown/moderate-risk activity, transcribe your finding from the environmental review report to the last column of Section B of the ERF.

STEP 7. SIGN CERTIFICATIONS **(SECTION C OF FORMER.)**

STEP 8. SUBMIT FORM TO USAID C/AOTR. **BE SURE TO ATTACH THE ENVIRONMENTAL REVIEW REPORT, IF ANY.**

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ENVIRONMENTAL REVIEW FORM FOR XXX PROGRAM SUBPROJECTS/SUBGRANTS

Follow, but do not submit, the attached instructions.

A. APPLICANT INFORMATION

Organization	Parent grant or project
Individual contact and title	Address, phone & email (if available)
Proposed subproject /subgrant (brief description)	Amount of funding requested
	Period of performance
	Location(s) of proposed activities

B. ACTIVITIES, SCREENING RESULTS, AND FINDINGS

Proposed activities (Provide DESCRIPTIVE listing. Continue on additional page if necessary)	**Screening result** (Step 3 of instructions)			**Findings** (Step 6 of instructions. Complete for all moderate/unknown and high-risk activities ONLY)		
	Very Low Risk	High-Risk*	Moderate or unknown risk*	significant adverse impacts are very unlikely	With specified mitigation, significant adverse impacts are very ...	Significant Adverse impacts are possible
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

*These screening results require completion of an Environmental Review Report

C. CERTIFICATION:

I, the undersigned, certify that:

1. The information on this form and accompanying environmental review report (if any) is correct and complete.
2. Implementation of these activities will not go forward until specific approval is received from the C/AOTR.
3. All mitigation and monitoring measures specified in the Environmental Review Report will be implemented in their entirety, and that staff charged with this implementation will have the authority, capacity and knowledge for successful implementation.

(Signature) _____ (Date) _____

(Print name) _____ (Title) _____

NOTE: IF SCREENING RESULTS FOR *ANY ACTIVITY* ARE "HIGH RISK" OR "MODERATE OR UNKNOWN RISK," THIS FORM IS NOT COMPLETE UNLESS ACCOMPANIED BY AN ENVIRONMENTAL REVIEW REPORT.

BELOW THIS LINE FOR USAID USE ONLY

Notes:

1. For clearance to be granted, the activity MUST be within the scope of the activities for which use of the ERF is authorized in the governing IEE. **Review IEE before signature.** If activities are outside this scope, deny clearance and provide explanation in comments section. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.

2. Clearing an ERF containing one or more findings that **significant adverse impacts are possible** indicates agreement with the analysis and findings. It does NOT authorize activities for which "significant adverse impacts are possible" to go forward. It DOES authorize other activities to go forward. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.

CLEARANCE RECORD

C/AOTR ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
USAID/XXXX MEO ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
Regional Env. Advisor (REA) ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
Bureau Env. Officer (BEO)* ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)

C/AOTR, MEO and REA clearance is required. BEO clearance is required for all "high risk" screening results and for findings of "significant adverse impacts possible. The BEO may review "

Note: if clearance is denied, comments must be provided to applicant (use space below & attach sheets if necessary)

NOTE TO INDIVIDUALS ADAPTING THE:

* SUPPLEMENTAL ENVIRONMENTAL REVIEW FORM FOR NRM ACTIVIES

FOR USE ON A PARTICULAR PROGRAM/ACTIVITY:

- This supplement is oriented around major resource/issue clusters and asks "leading questions" about the actual potential for unintended harmful impacts, especially of CBNRM/ ecotourism activities.
- **Underlined & blue** highlighted text MUST be modified to reflect project and mission name
- Questions should be modified to respond to the needs of individual projects. This is intended to be a "living" document subject to adaptation.

DELETE THIS PAGE BEFORE MODIFYING/DISTRIBUTING THIS FORM

17 Jan 2005

SUPPLEMENT TO THE ENVIRONMENTAL REVIEW FORM FOR NATURAL RESOURCES ACTIVITIES

ADDITIONAL SCREENING CRITERIA FOR NATURAL RESOURCE ACTIVITIES UNDER XXX PROGAM

PURPOSE

This is a supplement to the "Instructions for environmental review of XXX Program/Project activities." It is to be used for natural *resources-based activities*, including:

- Community-Based Natural Resource Management (CBNRM)
- Ecotourism
- Natural resources-based enterprise development with micro- and small enterprises

This supplement provides additional questions to ascertain whether these proposed activities should be categorized as "very low risk:"

- If the answers to ALL the questions that follow are "NO," then the proposed natural resource-based activity is considered "very low risk."
- If the answer to ANY question is "YES," the activity CANNOT be considered "very low risk."

SCREENING CRITERIA

Will the activities…	YES	NO
Natural Resources		
Accelerate erosion by water or wind?		
Reduce soil fertility and/or permeability?		
Alter existing stream flow, reduce seasonal availability of water resources?		
Potentially contaminate surface water and groundwater supplies?		
Involve the extraction of renewable natural resources?		
Lead to unsustainable use of renewable natural resources such as forest products?		
Involve the extraction of non-renewable natural resources?		
Restrict customary access to natural resources?		
Reduce local air quality through generating dust, burning of wastes or using fossil fuels and other materials in improperly ventilated areas?		
Affect dry-season grazing areas and/or lead to restricted access to a common resource?		
Lead to unsustainable or unnecessarily high water extraction and/or wasteful use?		

Will the activities…	YES	NO
Ecosystems and Biodiversity		
Drain wetlands, or be sited on floodplains?		
Harvest wetland plant materials or utilize sediments of bodies of water?		
Lead to the clearing of forestlands for agriculture, the over-harvesting of valuable forest species?		
Promote in-forest bee keeping?		
Lead to increased hunting, or the collection of animals or plant materials?		
Increase the risks to endangered or threatened species?		
Introduce new exotic species of plants or animals to the area?		
Lead to road construction or rehabilitation, or otherwise facilitate access to fragile areas (natural woodlands, wetlands, erosion-prone areas)?		
Cause disruption of wildlife migratory routes?		
Agricultural and Forestry Production		
Have an impact on existing or traditional agricultural production systems by reducing seed availability or reallocating land for other purposes?		
Lead to forest plantation harvesting without replanting, the burning of pastureland, or a reduction in fallow periods?		
Affect existing food storage capacities by reducing food inventories or encouraging the incidence of pests?		
Affect domestic livestock by reducing grazing areas, or creating conditions where livestock disease problems could be exacerbated?		
Involve the use of insecticides, herbicides and/or other pesticides?		
Community and Social Issues		
Have a negative impact on potable water supplies?		
Encourage domestic animal migration through natural areas?		
Change the existing land tenure system?		
Have a negative impact on culturally important sites in the community?		
Increase in-migration to the area?		
Create conditions that lead to a reduction in community health standards?		
Lead to the generation of non-biodegradable waste?		
Involve the relocation of the local community?		
Potentially cause or aggravate land-use conflicts?		

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Annex 8: WQAP Template

USAID/Africa Bureau

Water Quality Assurance Plan Template

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WATER QUALITY ASSURANCE PLAN

PROJECT/ACTIVITY DATA

Project/ Activity Name:	
Implementation Start/End:	
Solicitation/Contract/Award Number:	
Implementing Partner(s):	
Geographic Location(s):	
Period of Performance:	
Tracking ID/file name/Link of Parent (Source) IEE for Program/ Activity / D.O.	
Tracking ID/link of WQAP	
Tracking ID/link of Other, Related Analyses:	

ORGANIZATIONAL/ADMINISTRATIVE DATA

Implementing Operating Unit(s): (e.g. Mission or Bureau or Office)	
Funding Amount:	
Lead BEO Bureau:	
Prepared by:	
Date Prepared:	
Submitted by:	
Date Submitted:	
Implementing Partner individual contact and title, address, phone and email	
USAID AOR Contact:	
Proposed subproject/ subgrant	
Location of WASH Activities	

Certification:

I, the undersigned, certify that:

1. The information on this form and accompanying WQAP is correct and complete.
2. Implementation of these activities will not go forward until specific approval is received from the C/AOR.
3. All mitigation and monitoring measures specified in the WQAP will be implemented in their entirety, and that staff charged with this implementation will have the authority, capacity and knowledge for successful implementation.

(Signature) _____ (Date) Click or tap to enter a date.

(Print name) Click or tap here to enter text. (Title)

PROJECT/ACTIVITY NAME: _____

[*Include signature blocks in accordance with Bureau and/or Mission policy. At a minimum include the noted required signatures. Add other signatures as necessary.*] (CUSTOMIZABLE BY BUREAU)

Notes:

1. For clearance to be granted, the activity MUST be within the scope of the activities for which use of the WQAP is authorized in the governing IEE. **Review IEE before signature.** If activities are outside this scope, deny clearance and provide explanation in comments section. The Partner, C/AOR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.

2. Clearing a WQAP containing one or more findings that **significant adverse impacts are possible** indicates agreement with the analysis and findings. It does NOT authorize activities for which "significant adverse impacts are possible" to go forward. It DOES authorize other activities to go forward. The Partner, C/AOR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.

Approval:

Clearance:	_____ [NAME], Activity Manager (as appropriate)	_____ Date
Clearance:	_____ [NAME], A/COR (required)	_____ Date
Clearance:	_____ [NAME], Mission Environmental Officer (as appropriate)	_____ Date
Clearance:	_____ [NAME], Regional Environmental Advisor (as appropriate)	_____ Date
Concurrence:	_____ [NAME], _____ Bureau Environmental Officer (if required)	_____ Date
Concurrence:	_____ [NAME], _____ Bureau Environmental Officer, (other BEOs as appropriate)	_____ Date

* C/AOR, MEO and REA clearance is required. BEO clearance is reserved for 'high risk' activities as determined by the Mission or REA, or where the environmental screening has determined that 'significant adverse impacts' are possible. Scale, number of beneficiaries & sites, urban settings, potential contaminants, etc., may be factors.

DISTRIBUTION: [*Customizable*]

CONTENTS

Tables

I. INTRODUCTION

In this section the IP describes the program/project to provide the context for the WQAP development and implementation. The section introduces assumptions regarding the WQAP process and the sections to follow. It will also include a sufficiently detailed description of the number and type of drinking water systems proposed for the program.

For detailed instructions, please refer to Step I of the WQAP Guidance Note (Page 1)

II. ASSESSMENT OF APPLICABLE WATER QUALITY STANDARDS AND CRITERIA

A. RESEARCH OF REGULATORY REQUIREMENTS

In this section the IP describe the results of the completed research on the applicable guidance for drinking water systems from USAID, host country regulations and the World Health Organization (WHO). The minimum recommended Water Quality Parameters are shown below. The IP should also consider additional water quality concerns based on site considerations or available information.

For detailed instructions, please refer to Step II of the WQAP Guidance Note (Pages 1-5).

USAID RECOMMENDED WATER QUALITY PARAMETERS:

- Health-Related Parameters:
    1) Arsenic
    2) Fecal Coliform
    3) Fluoride
    4) Nitrate (as NO_3)
- Operational-Related Parameters:
    5) Electrical conductivity (EC)
    6) Total Dissolved Solids (TDS)
    7) pH
    8) Turbidity

HOST COUNTRY REGULATIONS

In this section the IP should review and describe the host country's regulatory requirements. This section should document results of research prior to selection of the standards included in Tables II-A and II-B in Section B.

WHO GUIDANCE

The IP should review and describe the critical water quality parameters from World Health Organization (WHO) guidance to be evaluated and incorporated into the WQAP here. This section should document the results of the research prior to selection of the standards included in Tables II-A and II-B in Section B.

B. INVENTORY OF SELECTED WATER QUALITY STANDARDS

The IP documents, in narrative form and in Tables II-A and II-B below, the selected water quality standards or guideline values, and criteria based on the research completed in Section A above.

For detailed instructions, please refer to Step II of the WQAP Guidance Note (Pages 1-5).

The drinking water quality parameters summarized in Tables II-A and II-B are the basis of water quality monitoring for this program. Note that samples are collected and analyzed at least once before construction and once at commissioning of the water source. After commissioning the new supply source, the parameters are tested at the frequency suggested below for each parameter. The USEPA guidance values below are from the USEPA *National Primary Drinking Water Regulations*.[14] The WHO guidance values are from the WHO *Guidelines for Drinking-Water Quality* (WHO, 2017).

The IP should add more narrative (and/or modify the above narrative) to describe site specific supplemental parameters based on local conditions. In addition, the IP must complete the tables below.

Table 0-A: Applicable Human Health-Related Drinking Water Quality Parameters of Concern

USEPA GUIDANCE			HOST COUNTRY REGULATIONS		WHO GUIDANCE	
Parameter	**Limit**	**Frequency**	**Limit**	**Frequency**	**Limit**	**Frequency**
Arsenic	0.01 mg/l	quarterly	Click here to enter text.	Click here to enter text.	0.01 mg/l	N.S.
Fecal Coliform*	00/100 ml	quarterly	Click here to enter text.	Click here to enter text.	00/100ml	N.S.
Fluoride	4.0 mg/l	Click here to enter text.	Click here to enter text.	Click here to enter text.	1.5 mg/l	N.S.
Nitrate (as NO_3)	10 mg/l	Click here to enter text.	Click here to enter text.	Click here to enter text.	50 mg/l	N.S.

[14] USEPA National Primary Drinking Water Regulations: https://www.epa.gov/ground-water-and-drinking-water/table-regulated-drinking-water-contaminants#Inorganic

Click here to add text. Please add additional site specific parameters. Add as many rows as needed.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

Notes: * Analysis for thermos-tolerant coliforms (TtC) bacteria, or Escherichia coli.

N.S. Not specified in the guidance

Table 0-B: Applicable Operational-Based Drinking Water Quality Parameters of Concern

USEPA GUIDANCE			HOST COUNTRY REGULATIONS		WHO GUIDANCE	
Parameter	**Limit**	**Frequency**	**Limit**	**Frequency**	**Limit**	**Frequency**
Electrical Conductivity (EC)(1)	1600 µS/cm	Click here to enter text.	Click here to enter text.	Click here to enter text.	N.S.	N.S.
TDS	500 mg/l	Click here to enter text.	Click here to enter text.	Click here to enter text.	1000 mg/l	N.S.
pH	6.5-8.5 S.U.	Click here to enter text.	Click here to enter text.	Click here to enter text.	N.S.	N.S.
Turbidity (2)	5 NTU	Click here to enter text.		Click here to enter text.	N.S.	N.S.
Click here to add text. Please add additional site specific parameters. Add as many rows as needed.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

Notes: (1) The value of electrical conductivity (EC) is based on the State of California secondary MCL for drinking water from the range of EC at 900 to 1600 µS/cm. (California State Water Resources Control Board, 2010)

(2) USEPA has not promulgated guidance values for turbidity; however, per the USEPA Surface Treatment Rule, in drinking water systems, turbidity must not exceed 5 NTU; systems that filter must ensure that the turbidity go no higher than 1 NTU (0.5 NTU for

conventional or direct filtration) in at least 95% of the daily samples for any two consecutive months: http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=500025GQ.txt

RATIONALE FOR SELECTION OF SITE SPECIFIC WATER QUALITY PARAMETERS:

In this section the IP describes the results of sanitary surveys and other research that led to the selection of additional water quality parameters of concern listed in Tables II and III. This section also includes the rationale for selecting guideline values or limits for water quality testing that trigger corrective actions. It should also provide the rationale for the selected testing frequency.

III. RESOURCES FOR SAMPLE COLLECTION AND LABORATORY ANALYSIS

In this section, the IP describes how and where samples will be collected, field measurements will be performed, and laboratory analysis will be completed. The available resources must be documented here, in each section in brief narrative form. In addition, the resources must be documented by completing or expanding Table III-A in Section III C to capture all the information gathered.

For detailed instructions, please refer to Step III of the WQAP Guidance Note (Pages 5-12).

A. SAMPLE COLLECTION AND FIELD MEASUREMENT

AVAILABILITY OF TRAINED PERSONNEL

In this section the IP identifies availability of specific water quality staff and qualifications.

AVAILABILITY OF APPROPRIATE EQUIPMENT

In this section the IP identifies specific equipment that will be used throughout the process.

PROCEDURES AND PROTOCOLS FOR COLLECTION, MEASUREMENT, SAMPLE PRESERVATION AND TRANSPORT TO LABORATORIES.

In this section the IP includes detailed SOPs and record keeping tools to be used here.

B. LABORATORY ANALYSIS

LOCATION OF NEAREST QUALIFIED LABORATORY

In this section the IP includes a narrative and table of qualified laboratories with contact information.

AVAILABILITY OF PROPER ANALYTICAL EQUIPMENT

In this section the IP lists and describes specific equipment that will be used for each water quality parameter test.

AVAILABILITY OF TRAINED PERSONNEL

In this section the IP identifies the laboratories key water quality technicians and managers and their qualifications.

REPORTING AND QA/QC OF DATA

In this section the IP describes the laboratories QA/QC procedures.

FIELD ANALYSIS USING PORTABLE TEST KITS

In this section the IP identifies the field test kits that will be used (if applicable) and the accuracy and specified range of the test kits and associated analytical procedure.

C. DOCUMENTATION OF AVAILABILITY OF RESOURCES

Compete Table III-A to document the available resources for the program. The IP must include the site-specific list of parameters from Tables II-A and II-B. Add additional rows as needed.

TABLE 0-C: AVAILABILITY OF RESOURCES FOR SAMPLE COLLECTION AND LABORATORY ANALYSIS

	Collection and Field Measurement			Laboratory Analysis and Reporting			
Parameter	Field Team	Equipment	Protocol	Lab Location	Equipment	Methodology, Uncertainty	Personnel

IV. SUSTAINABILITY AND OPERATIONAL FACTORS AFFECTING WATER QUALITY

In this section, the IP must describe the results of the planning phase of the water project which contribute to the maintenance of safe water quality for the project beneficiaries. Please see the detailed instructions in Step IV of the WQAP Guidance Note on pages 12 and 13.

PLANNING

DESIGN AND CONSTRUCTION

In this section the IP includes specific or applicable standards for design and construction of water supply infrastructure.

SOURCE PROTECTION

In this section the IP describes source protection measures to be undertaken.

OPERATIONAL SUSTAINABILITY

STAKEHOLDER PARTICIPATION

In this section the IP describes the process by which stakeholders will be engaged and how the transfer to local responsible parties will occur.

ROUTINE OPERATION AND MAINTENANCE

In this section the IP describes the process by which stakeholders will be engaged and their roles and responsibilities.

ROUTINE MONITORING AND TESTING

In this section the IP describes the process by which stakeholders will be engaged and their roles and responsibilities.

TRAINING

In this section the IP describes how and what training should be delivered.

V. CORRECTIVE MEASURES

The IP should ensure that language included in this section is consistent with requirements laid out in the project IEE. In this section the IP describes the initial response and steps necessary to maintain water quality, describes the corrective measures that should be undertaken, and how local authorities and USAID staff will be notified and consulted.

Please see the detailed instructions in Step V of the WQAP Guidance Note on pages 13 through 15.

In this section the IP describes the approach to resolving water quality contamination issues. The approach should correspond with the guidance providing in Annex 3: Approach to Resolution of Water Quality Contamination, and to the applicable IEE language.

A. HUMAN HEALTH-RELATED DRINKING WATER QUALITY PARAMETERS OF CONCERN:

In this section the IP describes the specific corrective actions that will be undertaken if any of the health-related drinking water quality parameters listed in Table II-A are exceeded. This information should correspond with the specific requirements included in the project IEE. See Section 6 of Annex 5 of the WQAP Guidance Note: Suggested IEE Language on Water Quality Monitoring.

B. OPERATIONAL-BASED DRINKING WATER QUALITY PARAMETERS OF CONCERN:

In this section the IP describes the specific corrective actions that will be undertaken if any of the operational-based drinking water quality parameters listed in Table II-B are exceeded. This information should correspond with the specific requirements included in the project IEE. See Section 6 of Annex 5 of the WQAP Guidance Note: Suggested IEE Language on Water Quality Monitoring.

SUMMARY EMMP MATRIX

This section should include the completed summary matrix of environmental mitigation and monitoring measures as indicated in the example EMMP shown below and at this internet location: http://www.usaidgems.org/wqap.htm

Example Summary WQAP EMMP Matrix

XXX WASH PROJECT
SITE: XXX
Environmental Mitigation/ Enhancement Plans for Established WASH Projects

WATER QUALITY ASSURANCE PLAN

Activity: Water Supply
Adverse Impact: Inadequate Water Quality

Sites: Water Pans: *Location XXXX*. Boreholes: *Location XXXX*. Pipeline Extension: *Location XXXX*. Rock Catchments: *Location XXXX*. RWH Tanks: *Location XXX.*

SOURCE TYPE	MITIGATION PLAN	EVIDENCE OF MITIGATION MEASURE	FOLLOW UP/ FREQUENCY	RESPONSIBLE PERSONS/ ORGANIZATIONS
	CONSTRUCTION STAGE			
Water Pans	a) Construct cattle troughs away from the water pan site b) Provide a cutoff trench for any storm water flowing in from any nearby farms, markets, trading centers etc c) Construct a suitable silt trap to control siltation of the reservoir d) Construct the embankment with gentle and well compacted slopes to prevent any soil erosion of the walls during rainy seasons e) Plant appropriate grass, other groundcover and/or trees on the embankment and its sorrounding catchments respectively f) Provide adequate dead storage below the intake chamber to minimize siltation of the draw pipe g) Fence round the water pan site	Installation, completion reports, photos	After construction and every three months	Contractors, community and IP

SOURCE TYPE	MITIGATION PLAN	EVIDENCE OF MITIGATION MEASURE	FOLLOW UP/ FREQUENCY	RESPONSIBLE PERSONS/ ORGANIZATIONS
	h) Ensure all spilled oils and fuels are properly disposed i) Properly dispose off all waste/ unwanted matter from the reservoir j) Install an appropriate water treatment unit			
Boreholes	a) Install durable pipe casings b) Ensure proper disposal of waste materials from the drillings pit to prevent any seepage to the ground water c) Proper development of the pit to remove any unwanted material occurring during drilling process d) Take water samples for physiological, chemical, bacteriological and arsenic water quality testing in an approved government laboratory. e) Fence round the borehole and pump house sites f) Ensure all spilled oils and fuels are properly disposed by removing affected soil g) Provide appropriate treatment system to remove identified chemical impurities	Installation, completion reports, photos water quality reports, photos, design drawings for treatment units	During construction, after construction and after every three months	Contractors, IP, community
Pipeline Extension	a) Avoid swampy areas in installation of the pipes or else use galvinized iron (GI) pipes in swampy areas to prevent any cracks of pipes and an eventual pipe water contamination b) Cover all the installed pipes/ refilling the excavated trenches with soil c) Conduct physio-chemical and bacteriological water quality tests at the end point of the pipeline extension to ascertain any contamination in the line d) Provide appropriate water treatment system	Installation, completion reports, photos,water quality reports, photos	During and after construction and after every three months	IP, relevant ministry, community
Rock catchments	a) Fence all round the developed rock catchments b) Cart away or remove all waste matter from the rock catchments c) Construct diversion trenches in the upstream of the rock catchments to prevent any outside storm water from flowing inside d) Conduct water quality analyses and provide appropriate treatment system	Installation and water quality reports, photos	During and after construction and after every three months	Community, contractor
Rain water harvesting	a) Provide an overflow pipe b) Provide a Wash out pipe at the bottom of the tank	Installation and water quality reports, photos	During and after construction	Contractor, community

SOURCE TYPE	MITIGATION PLAN	EVIDENCE OF MITIGATION MEASURE	FOLLOW UP/ FREQUENCY	RESPONSIBLE PERSONS/ ORGANIZATIONS
(RWH) Tanks	c) Construct a suitable water collection chamber and provide adequate drainage for spilled water d) Conduct water quality analyses e) Sensitize the users on the need to boil drinking water		and after every three months	
Shallow wells	a) Take water samples for chemical, bacteriological and arsenic water quality testing in an approved government laboratory b) Fence round the shallow well c) Provide proper drainage of spilled water	Installation and water quality reports, photos	During and after construction and after evry three months	IP, community
	OPERATION STAGE			
Water Pans	a) Avoid entry of people and animals into the reservoir b) Maintain plant grass and trees on the embankment and its sorrounding catchments respectively c) Avoid cultivation of the catchments area d) Provide hygiene and sanitation facilities at least 50m away from the reservoir, pref. Downslope. e) Undertake water quality tests (physiochemical and bacteriological) on quarterly basis f) Conduct routine maintenance of rainwater catchment pan and water treatment system.	Water quality reports, photos	After every 3 months	Community, IP
Boreholes	a) Undertake water quality tests (physiochemical and bacteriological) on quarterly basis b) Maintenance of the borehole equipment and treatment unit c) Provide hygiene and sanitation facilities at least 50m away from the borehole at an approriate site d) Community senstization on proper handling of water after drawing it	Water quality reports, photos	After every 3 months and yearly	IP
Pipeline Extension	a) Undertake water quality tests (physiochemical and bacteriological) on quarterly basis b) Ensure immediate repairs of leakages to prevent any contamination of pipe water	Water quality reports	After every 3 months, continuous	IP, community

SOURCE TYPE	MITIGATION PLAN	EVIDENCE OF MITIGATION MEASURE	FOLLOW UP/ FREQUENCY	RESPONSIBLE PERSONS/ ORGANIZATIONS
Rock catchments	a) Remove any silt matter deposited in the catchments after and before the rainy season b) Replace the filter media placed in the catchments after some time to maintain proper filtration c) Undertake water quality tests (physiochemical and bacteriological) on quarterly basis	water quality reports	After every 3 months and yearly	Community, IP
RWH Tanks	a) Empty and clean the tank using chlorine twice a year b) Ensure the roof catchments is free from any foreign matter at all times c) Provide a cover lid in the inspection chamber	Reports from the users	6 months, continuously, after construction	School heads
Shallow wells	a) Undertake immediate repairs of any cracks on the well cap b) Undertake water quality tests (physiochemical and bacteriological) on quarterly basis c) Provide a diversion trench for any storm water to protect the well cap	Visual inspection of works, review water quality reports	After construction and after every 3 months	Community, IP

***NB**: Indicate if a water quality feasibility study has been conducted by a consultant and design plans are being developed for the recommended treatment units for all water sources. Installation of the treatment systems will be undertaken in the course of the year.*